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Playing With Your Self: A Philosophical Exploration of Attitudes and Identities in Games

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Abstract

The following thesis is situated at the intersection where philosophy and video games meet. Video games are unique cultural artefacts that ask participants to engage in activities that have little to no point beyond the intrinsic desire to 'play the game'. The domain of philosophy is helpful here for two reasons: firstly, philosophy provides a frame with which to view video games in the context of our world in an attempt to understand the motivation to engage in such activities. Secondly, and maybe more importantly, there is something similar about the kind of engagement that occurs when someone plays and when someone engages philosophically.

Through an analysis of several key texts about play and games (Huizinga, Suits), it will be shown that games can be defined as both an activity and an attitude. As activities, games open a temporary space where action can occur, where *games* can be *played*. As an attitude, however, games open temporary spheres of knowledge and belief, where players can experiment and manipulate *identities*. At its heart, the playful attitude is an educative attitude, in that it allows for the extension of the self into new areas of knowledge and belief.

In this thesis I explore these ideas by looking at the connections between games and education, communities of inquiry, personal identity, and autonomy. One particular focus, from John Dewey, is on rethinking our educative institutions as domains or communities where identities are constructed; how our habitat constructs our habits, and how we, through our habits, construct our habitats. The aim here is to add to the idea that games, and particularly video games, offer a unique way to engage with, and change, the world. Through games, for example, we are able to explore domains of knowledge and structures of belief without having to adhere to, or deny, them.

Declaration by author

This thesis is composed of my original work, and contains no material previously published or written by another person except where due reference has been made in the text. I have clearly stated the contribution by others to jointly-authored works that I have included in my thesis.

I have clearly stated the contribution of others to my thesis as a whole, including statistical assistance, survey design, data analysis, significant technical procedures, professional editorial advice, and any other original research work used or reported in my thesis. The content of my thesis is the result of work I have carried out since the commencement of my research higher degree candidature and does not include a substantial part of work that has been submitted to qualify for the award of any other degree or diploma in any university or other tertiary institution. I have clearly stated which parts of my thesis, if any, have been submitted to qualify for another award.

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Publications during candidature

Book Chapter

Miller, L. (2015). The Owl and the One Armed Boy. In Michaud, N. (Ed.). *Adventure Time and Philosophy*. (pp. 89-100). Open Court.

Conference Proceedings

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We are the products of our communities. Everything that I am or will be is a reflection of my communities; a combined set of experiences that I have distilled into the man that I am today. I take full responsibilities for my actions, not because I am a self-made person, but because my actions are a result of the effect the people in my life have had on me. In short, I owe them. Every triumph is theirs, and every failing and mis-step is proof that my ideals, the ideals I embody, are a greater set than any one person can achieve, because they are built upon the people who I look up to most in life.

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Introduction

Habilitation of the playful

> I moved in over his shoulder and wondered whether he'd just had some 'wow' way of being that took notice of alternatives. Did he know he was somewhere special and utterly fantastic, hopeful and terrifying, a world we've never seen before? Was there some irony, amazement, awe, sadness, anything other than facts about missiles to discuss? Could we make talk of the experience and not just the conduct? (Sudnow 1983, p.10)

David Sudnow articulates a way of being that so many gamers have been aware of for some time; a way of being that values the experience of an activity over its perceived value. In *Pilgrim in the Microworld* (1983) Sudnow documents his exploration of several video games. His initial position is one of distain for the medium, which makes his eventual conversion all the more compelling. In many ways Sudnow articulates some deep truth about game playing, one that so many struggle to identify when justifying their game time to their parents, teachers, partners, friends, and society generally. This is what C.S. Lewis (1970) describes as *looking along* rather than *looking at* – a distinction I will address later in the next chapter. Sudnow's journey paints the picture of someone who *looks at* video games, is seduced into *looking along* video games, and emerges with a new sense of both visions.

Pilgrim in the Microworld is one of several texts which inspired the thesis contained within this doctoral dissertation. The medium of video games has emerged over the last few decades. It all started as a proof of concept of the innovative 'personal computer' of the 1950's. One of the two creators of the first video game, *Tennis for Two*, was Dr William Higinbotham whose creation delighted the scientific community in 1958. His story is noteworthy:

> Higinbotham had worked on the Manhattan Project, and like many scientists who worked on the project, he was plagued by guilt when the bomb was used on Hiroshima … Making the simple game was another way to let off steam. In his role of government scientist, Higinbotham was the maker of the trigger that set of the nuclear bomb. In his role as Brookhaven entertainer, he was someone who

> could give pleasure beyond the passive but tangible joys of listening to music. His real gift was one of interactivity. His experiment allowed people to become one with a machine. Hands on and gloves off, they competed, they won or lost, and those excited folks told other people of their newfangled adventure. (Goldberg 2011, pp. xx-xxi)

Higinbotham should be considered the founder of the modern video game, for several reasons: firstly, because *Tennis For Two* was the first time computer technology had been used in this way, and secondly, and just as importantly, because Higinbotham, having helped to create something as destructive and ugly as the nuclear bomb, used that same technology (the trigger) to then create something that brought something else to the world (The controller interface); fun. The video game is one person's response to war, and we have seen this theme carried on to the modern day with games like *This War of Mine, Papers Please, The Saboteur, and the Call of Duty series* among so many others.

The history of video games is an interesting journey that follows people like Dr Higinbotham. It is a history, not just of technological advancement, but the striving of men and women in search of meaning through experience. At its core, this thesis is about the people who play games, not just the games themselves. This is because, as I discuss in Chapter 2, it is the attitude of the gamer that is the most important part of any game.

Violence, Harm, and the Digital Boogie Man

One of the first questions you might be expecting me to address is the obvious and catastrophic harm video games inflict on our youth. If so, you may be disappointed at the following. The various facts of the matter remain unclear, however while it is definitely true that there is a wide range of research that suggests this harm (see Anderson & Bushman 2001; Anderson 2009;), there is equally compelling responses that imply the opposite (see Mathiak & Weber 2006; Cogburn & Silcox 2009). If taken as all equally weighted, video games make aggressive, angry, violent, sociopathic teenagers and teach them how to shoot. Simultaneously, they create multi-tasking, problem-solving, highly creative go-getters who will solve all the worlds problems in a few years and retire on a big pile of money, because they are so successful. Both camps may be somewhat stretching the truth. There are a few assumptions based on the research that can be made. Firstly, games do not turn us into sociopathic killing machines, and they do not teach us how to shoot, kill,

and generally make war. An example of this can be found in a growing body of evidence from a charity group by the name of Operation Supply Drop. This organisation has been using video games to help US, NATO, and ANZAC soldiers and others deployed overseas. Many soldiers play games in their down time, as community building tools, and to aid in the support of people suffering from PTSD and depression (Kotaku 2013). In the increasing literature around this project, it is clear how real soldiers view video games, particularly war games.

> People certainly don't avoid FPS (first person shooter) games just because they're in the military. They take them just like everything else, it's a game, it's not realistic, no matter how realistic the developers try to make it. It's just like when you're watching a badly done war movie and you look and 'that would never happen', so it's the same with video games. Watching people play Call of Duty or Battlefield, everyone's literally jumping around...and you never do that. Nobody jumps. (http://www.abc.net.au/tv/goodgame/stories/s4220759.htm)

What we can conclude from this is that games (particularly video games) have *an* effect on us. However, to claim anything more about whether games make us smarter, dumber, more violent, more social, or anything els at this stage is to attempt to hold an unreasonable position. But what does this amount to? How do we decide whether video games are good or evil (if, indeed, we buy into this dualism)? In order to answer this, consider other things that have an effect on us. Here are three examples: money, dynamite, and blood. In all three cases it is clear that, with the right amount and used in the right way money, dynamite, and blood are very useful things that help us buy things, blow up things, and carry oxygen around the body respectively. However, too much or too little, or used incorrectly, and all three become dangerous. To claim that money is either good or evil is to misunderstand money, either as a means of purchasing things that we want, or as a means of being controlled by forces beyond our reach. Claim that dynamite is good or evil and you may miss out on what might be considered advantages like mining resources or tunnelling through rock, or you may fail to adequately protect yourself. To claim blood is good or evil is possibly to misunderstand biology. There are, of course, moral reasons why we judge such things to be good or evil, and, indeed, volumes of literature on applied ethics illustrate this point. However, the absurdity of this analogy is hopefully not lost here. To claim something like video games are either all good or all bad, harmful *or* beneficial, is to misunderstand both what video games are and what harm and benefit are. In the first instance, then, this thesis seeks to explore what it means to be affected by

games, particularly video games. What are some of the harms and benefits, and can these be constructive in some way?

From My Experience

Video games have captured my attention since I was 5 years old. My first encounter was when my brother received a Game Boy for his birthday. The game was Super Mario Land, and it was hard. In the years that we had that game, I watched my brother beat the final boss only once. I never came close, always dying at the hands of a giant, flying rock head (don't ask). I look back on that game and for some time thought it was the hardest one ever made. When I was about 15 years old I bought a second hand copy of Super Mario Land and loaded it up on one of my carefully cared-for original Game Boy machines. I beat it in about an hour and a half. Another game I played as a teenager was Donkey Kong Country 2. For years I couldn't get past this one level. Years. Then, on a whim one afternoon I challenged my old foe again and beat it on the first run through. I went on to finish the game that day. It not only justified the failures I had suffered for many years, it erased them and replaced each and every one of them. Each death became just a stepping stone to my now inevitable success.

Stories like this one litter my childhood; tales of challenge, defeat, and eventual success. This is what draws me back to video games, even as an adult. Gamers can strive for the best and come up short countless times. But you only have to succeed once for it to all be worth it. This is the first lesson video games teach those who play; it is a lesson in perseverance. It is also a humbling lesson, because what is learnt is that success only comes after many failures. Success, in whatever way you wish to characterise that word, is something that is earned, not something that is won. But also, and this may be more important, that one instance of success can counterbalance any amount of failure.

When is a Game a Game and when is it Educational?

All this has implications for education and can shift our thinking about educational games and their role as classroom resources to accompany and inform curriculum. From a young age, our very first attempts at inquiring into the world are centred on play. Children manipulate the world around them to suit their games; deciding that this stuffed animal is their companion, that the bowls in the kitchen are instruments, and that the dining room is a jungle. Early childhood development

programs and child-care facilities are constructed around this very idea. Yet, as we grow older, the notion that the world can be manipulated in these ways tends to fade.

This fading may be due to a current problem with educational games. As games become more directed at a particular end, a growing tension arises from the fact that these activities, which are designed with intrinsic goals and motivations in mind, become increasingly co-opted to produce some external outcome, namely learning. This tension corrupts the play experience, so that what is left is either a game with potential educational qualities that no-one wants to play, or a very enjoyable gaming experience that lacks sufficiently deep educational qualities. However, commercial games show us that this is not a problem of complexity. Commercial video games can be massively complex and require many hours of concentrated action in order to complete them, and still capture the attention of gamers of all ages. What's more, these complex games *can impart* knowledge and contain within them educational worth, and so the question is 'how can we harness this level of complexity and use it for exploration of a more directed sort'? Is this even possible?

One very important goal in exploring the spaces where games can enter our educational institutes is to promote the idea that it is just as imperative for the adult to play with her world as the child. It is undeniable that children, teenagers, and adults play in different ways, but one thing they have in common is the desire and need to engage with the world in this way. Play is a way in which we can come to have an understanding of our world and our-selves. With that in mind, the first task of this dissertation will be to comprehend the terms *play* and *game*.

An Overview

What I will argue for is that the playful attitude is a method of inquiry that can be used to explore unknown spaces, areas of knowledge, and ways of being. To this end I will argue firstly that play and games ought to be thought of as both activities and attitudes. Next I will discuss the work of James Paul Gee (2007) who analyses the educative potential in video games. Then I will link this analysis to the educational theories of John Dewey (2005), Lev Vygotsky (1978), and Mihaly Csikszentmihalyi (1990). In looking at these connections, I will explore what I believe to be one of the main purposes of education, the construction and understanding of the autonomous self. Finally, I will construct a pedagogy of play, where the concept of the playful attitude aids in guiding student and teacher discovery and learning.

Chapter 1 deals solely with the concepts of play and games in order to highlight exactly what is being explored, namely the person who plays and the attitude or attitudes they embody when they play. Through an analysis of Johan Huizinga's (1950) *Homo Ludens* and Bernard Suits' (1978) *The Grasshopper*, the first and most important part of the concept of play is that it is both an activity that is undertaken and an attitude that is embodied by someone who plays. While play activities are themselves very interesting, it is the playful attitude that is of the highest importance when understanding the how and why of play. Similarly, it is argued that games, as a highly focused and specific form of play, can also be thought of in these terms. However, games offer a more direct connection between attitude and activity. While play activities encourage the playful attitude, games (gaming activities) *require* the playful attitude in order to engage with them. Without the playful attitude, we cannot be playing a game.

The dualism of attitude and activity that is expressed in the concepts of play and games is one of reciprocal interaction. Each one entails the other, necessarily for games, and more informally for other, less rigid play activities. This dualism emerges many times throughout the dissertation, highlighting the nature between the physical and the mental realms. It shows a break from Cartesian metaphysics, where the physical and mental worlds are no longer seen as separate. This is explored in Chapters 3, 4 and 5 in different ways.

Chapter 2 introduces the work of Gee (2007). *What Video Games Have to Teach Us about Learning and Literacy* investigates how video games teach those who play them. Gee develops an account of situated learning that identifies three distinct identities while playing a game that allow students to immerse themselves in a subject, topic, or area of knowledge. These are the virtual, the real world and projective identities. The gamer identifies with her virtual character in-game, herself in the real world and a third, complex identity that, in short, is what she wants for her virtual self. The projective identity is distinct in that it is what the gamer wants her virtual character to become; an underling ethos or motivation that the real world self imposes on the virtual self. The parallel Gee draws between video games and learning centres on these identities. In order for good learning (as described by Gee) to occur, we must extend our selves out into the world. We do this through the social groups to which we belong or we seek to belong. Belonging to a particular group allows us to think and learn in that particular way. We endorse the value systems of the groups we belong to, and this forms various aspects of our identity.

Much of Gee's work is focused on ways of learning and development that have foundations in the works of Vygotsky (1978), Csikszentmihalyi (1990), Dewey (2005), and Charles Sanders Peirce (1974) among others. Specifically in this chapter, two relationships to Gee's idea of good learning are developed; firstly, Vygotsky's zone of proximal development (ZPD), and secondly, Csikszentmihalyi's theory of optimal experience or *flow*. The importance of both the ZPD and flow theory to Gee's work is in advocating for continual movement between states. Gee asks the student to *become* someone else temporarily in order to enter what he terms the semiotic domain of an area of knowledge. What both the ZPD and Flow Theory necessitate is the movement in and out of semiotic domains of knowledge in order to critically reflect and assess what is going on inside and outside of these domains. This places value on both *looking at* and *looking along* domains of knowledge, in the sense Lewis describes, in terms of the individual and their place in these communities.

Chapter 3 further explores the ideas of communities of knowledge, semiotic domains, and individuals within communities. The continued analysis of Gee's theories concerning learning and development are explored through a pragmatist lens, specifically through the works of Dewey and, to a lesser extent, Peirce. This chapter highlights the importance of a particular kind of learning; what Gee refers to as situated learning, and Dewey calls habilitation. The habits and individual embodies and the habitats an individual occupies influence the kind of knowledge they can acquire. Once again, understanding the reciprocal nature of the physical and non-physical worlds is integral to understanding how we come to know something. This is because what Dewey calls communities of knowledge and what Gee calls semiotic domains are where our collective knowledge exists, both in the physical and social sense. Membership into these domains or communities is how we access context relevant, situated knowledge.

One of the themes explored throughout this thesis is the idea that the individual extends beyond themselves in different ways. We are, according to Dewey, social creatures who live in communities that share ideas, ideals, beliefs, and motivations. Given this, as our communities are made up of both habit and habitat, we can ask 'to what extent do we extend into the physical world'? Chapter 4 investigates the possibility put forth originally by Andy Clark and David Chalmers (1998); that the mind extends beyond the brain and into the world. The extended mind rejects the individualistic conception of cognition, instead seeing minds as being capable of forming coupled systems with parts of the external world to form new systems capable of thought. This is of particular importance when considering video games as it explores the nature of our interaction

between the human, the machine, and the world. Given this, when Gee says that we take on our virtual identity when we play, Clark and Chalmers would suggest this is a cognitive connection. Chapter 4 opens some interesting doors in terms of how we see the individual and identify them in the world. If cognition can bleed out into the world, how can the individual be identified as separate from the world or others?

Chapter 5 addresses this issue of identity and autonomy, and how individuals can still exist in a world with rapidly fading boundaries of identification. In order to maintain an idea of the individual in this system, the idea of autonomy is revised, and the Kantian atomistic individual is rejected in favour of a relational and intersectional self; one who exists within and because of the processes of socialisation. Catriona Mackenzie (2002; 2000), Natalie Stoljar (2000), Diana Meyers (2000), and Cynthia Levine-Rasky (2011) provide variations on autonomy that argue against the static atomistic individual. The first major claim in this chapter is that the playful attitude, an attitude that helps to explore and cultivate autonomy, entails this kind of autonomy.

The second part of Chapter 5 re-engages with a theme from previous chapters, the reciprocity of mind and body. It is here where I give an argument against the Cartesian claim that the body and mind are separate and causally connected. This first arises in Chapter 2, concerning activity and attitude. It again emerges in Chapter 3 when discussing habit and habitat. It is again raised in Chapter 4, relating to the nature of the mind extending into the world. And finally in this chapter where relational, intersectional forms of autonomy further blur the lines between the physical, the mental, and the social. In all of these instances, the notion that the mind and body are separate, but causal, is challenged. Cartesian metaphysics cannot account for this kind of individual. This line of reasoning is further supported by Peirce, and pragmatism generally, who rejected the dualism of mind and body in favour of a more phenomenological account of experience. Benedict De Spinoza offers a different view of the individual where the body and the mind are connected reciprocally, not causally. What alternative forms of the individual emerge from this conception, and how well it accounts for our autonomy and, most importantly, our playfulness, is discussed.

The aim of Chapter 6 is to begin exploring the ways in which the playful attitude can enter our schools and other educational institutions. I deconstruct several ways in which either games or play have been brought into the classroom and critically assess their successes and failings, specifically the concepts of Gamification, Gameful Design, and education games. These all fail to identify the connection between video games and education. In this chapter I argue that games have been mis-

categorised as learning tools, and should be thought of primarily as texts. I rely on a conception of texts which is developed from Adrian Wilson's concept of the virtual author.

It is the principles of learning, as understood by Gee's theory (discussed in Chapter 2) which games are constructed on that the previous theories were attempting to find. The second part of this chapter explores how adhering to these principles can aid in constructing a classroom around inquiry-based playful learning. The third section to this chapter concludes by looking at a different educational model that is regarded as playful, the Montessori Method.

While I present an argument for the place of play and games in education, implied is a theory of philosophy of education that is underpinned by a philosophy of play that commits to what might be considered play pedagogy. It is with this in mind that I now turn to the concept of play in the next chapter.

Chapter One
Play and Games

> I was standing today in the dark toolshed. The sun was shining outside and through the crack at the top of the door there came a sunbeam. From where I stood that beam of light, with the specks of dust floating in it, was the most striking thing in the place. Everything else was almost pitch-black. I was seeing the beam, not seeing things by it. Then I moved, so that the beam fell on my eyes. Instantly the whole previous picture vanished. I saw no toolshed, and (above all) no beam. Instead I saw, framed in the irregular cranny at the top of the door, green leaves moving on the branches of a tree outside and beyond that, 90 odd million miles away, the sun. Looking along the beam, and looking at the beam are very different experiences. (Lewis 1970, p.212)

In *Meditation in a Toolshed*, C.S. Lewis (1970) examines the way in which people view the world. *Looking along* the beam and *looking at* the beam, for Lewis, are ways of perceiving the world. We might think of looking at the beam as studying something from afar, or in isolation. Whereas looking along the beam is quite different; it is an active perspective, requiring participation rather than observation. When we *look along* the beam, we experience what we see; when *looking at* the beam, we experience the seeing. *Looking along* and *looking at* are ways of perceiving the world, but they are also ways which the world is ordered and explained. *Looking at* someone play a video game and you might think the activity is about mashing buttons, staring into flashing lights, and being bombarded by annoying sounds. However, when we *look along*, when we play a video game, we see and hear a world in those lights and sounds, and we desperately attempt to interact with this world by pushing specific buttons at the right time. Lewis asks the reader to consider which experience gives us access to the world. What he, indeed, is asking is: 'Does looking at or looking along show the truth of reality?' It appears as if there is some indefinable, experiential quality to looking along something, and yet we tend to value *looking at* much more. Why is this? As Lewis points out, we are often deceived by our experiences. Firsthand experience gets coloured in by emotion and context. The sun moves across the sky. The earth is flat. The stars are unreachable dots in the sky. Because of this any instance of *looking at* seems to trump the now dubious *looking along*.

> And is it not, you will ask, a very sensible basis? For, after all, we are often deceived by things from the inside. For example, the girl who looks so wonderful while we're in love, may really be a very plain, stupid, and disagreeable person. … Having been so often deceived by looking along, are we not well advised to trust only the looking at? In fact to discount all these inside experiences? Well, no. There are two fatal objections to discounting them all. (p.213)

Firstly, Lewis argues, there are some things that cannot be known without first experiencing them. Pain, for example, is not something that can be fully described; it must be felt to be understood. Other sensations like pleasure, anxiety, excitement, joy, and warmth are also things we only understand in relation to our own experiences of them; times when we have looked along. Lewis's second objection to discounting all inside experiences is that if we do not value the inside experiences (looking along), we cannot value *any* experience. Every outside perspective (looking at) is an inside perspective (looking along) from another view. He says, "You can step outside one experience only by stepping inside another. Therefore if all inside experiences are misleading, we are always misled" (p.213). Lewis concludes that:

> We must on pain of idiocy, deny from the very outset the idea that looking *at* is, by its own nature, intrinsically truer or better than looking *along*. One must look both *along* and *at* everything … We must start with no prejudice for or against either kind of looking. (p.213)

Looking Along Play and Games

The purpose of this chapter is to look at (and along) two very ambiguous concepts; 'play' and 'games'. The current definitions of these concepts are incomplete in the sense that they fail to give an account of what it is like to play, and why we do so. Definitions of play and games tend to list characteristics and terms expected to capture what it means to play. However, the characteristics of a thing are static, and the kind of thing play is (whatever it is) is active; it is in motion. The current ideas about play and games are exemplars of *looking at*; what I want to do is *look along* play and games. I want to do this because there is something very important about play and games that can only be found by looking along; by playing and being part of a game. My primary claim is that play and games are not just activities, but also *attitudes*. This idea was first put forth by Chad Carlson (2011) in his paper "The 'Playing' Field: Attitudes, Activities, and the conflation of Play and Games". In this chapter, I will take the theory a step further by asserting that play and game

attitudes are far more important than play and game activities. While I will focus primarily on these definitions for now, my aim is to build an ontology of games that will serve as a foundation for the rest of my thesis. Before I can defend this position, I need to have a close look at the current ideas of play and games. According to Dutch historian and cultural theorist Johan Huizinga (1950):

> Play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is 'different' from 'ordinary life'. Thus defined, the concept seemed capable of embracing everything we call 'play' in animals, children and grown-ups: games of strength and skill, inventing games, guessing games, games of chance, exhibitions and performances of all kinds. We venture to call the category 'play' one of the most fundamental in life. (p.28)

The above quote summarises Huizinga's (1950) initial description of play. *Homo Ludens* is important historically to game studies, and has had a wide range of influence, including on the work of Roger Caillois (1961) who brought together literary criticism, sociology, and philosophy. The book, which discusses the importance of play in culture and society, serves as the foundation or starting point for the concept of play. The first and probably most important characteristic of Huizinga's notion of play is that it is voluntary. Play is a voluntary activity, freely entered into and something that a person can freely leave at any time. It is, Huizinga claims, an act of freedom itself: “Here, then, we have the first main characteristic of play: that it is free, is in fact freedom” (p.8). We must choose to play, or we are not playing. However, when we look at Huizinga's claim again he appears to be saying more. Not only is play a free activity but, according to him, play is an *act of freedom*; it is somehow a manifestation of *the free*. This idea is further explored in Chapter 6.

Huizinga's second characteristic of play is that it is not ordinary or real life; it is not real. He is not saying that play cannot be serious, because indeed much of play is. Nor is he saying that play is unimportant. It is just not *real,* not part of our reality. “It is”, he says, “a stepping out of 'real' life into a temporary sphere of activity with a disposition all of its own” (p.8). Play *creates* other worlds by supposing a different set of starting conditions to our world. It is often said that play is not the real or ordinary world. But because of a fundamental lack of evidence which supports the existence of this real or ordinary world, I propose to think of it in this way: the world we live in (whatever and wherever that may be) is based on certain conditions of which we are either aware or unaware, e.g., gravity. We could be correct or incorrect about what we think gravity is or does, but it doesn't

matter for our immediate purposes. Gravitational force may have nothing to do with mass, but with a gravity monster that lives at the core of every celestial body. Despite this, our current conceptions of gravity still make up our idea of what the 'real' world is. We assume the sun will rise in the morning. We assume that gravity, associated with mass and not with a gravity monster, will continue at its usual force without interruption. We claim to know these things, and this knowledge forms the idea of what the real world *is* to us. I don't want to get dragged into a discussion of what we can know or whether we can know anything at all, but I am suggesting that this knowledge (regardless of its status as true knowledge) forms our idea of what the world is like. The point is that play *starts* by assuming the world is different from how we suppose it. When play begins it creates a whole new world in which action can take place. It depends on what is being played, but something is different from our current view of the world. Huizinga and others (e.g., Caillois 1961; Juul 2008) often refer to this as 'the magic circle'. Suppose the universe is a board consisting of 64 squares, or suppose climbing high things is the only good we ought to aspire to, or suppose dragons exist and have returned to destroy the world.

This move from the world we take to be real to the world of play uncovers something about play and reality. In later chapters the notion that play is not real is very important, because it allows us to act with little or no consequence, because it allows us to test ideas and concepts, and because it allows us entry into other worlds that are, as yet, unconnected to our own. However, all these movements pre-suppose that each individual is moving from some*where.* As I said, play starts by assuming the world is different from how we suppose it. This reveals two distinct points of interest. First, it is clear that not everything is play. There is distinctly a division between play and not play, or reality as the individual sees it. The second point, which is much less certain, is the idea of foundations. How I suppose the world is will most definitely be different from how others might suppose the world. This will become much clearer in later chapters, however, the idea that we are each coming from a unique position based on our beliefs, ideas, ideals, and motivations means that how we see the 'real' world is going to be slightly different from everyone else. Play, as a departure from the 'real' world, seems to suggest we are departing from some norm, but this does not mean everyone's norm is the same. The question to ponder here, but not yet answer, is 'do we have foundations to what we consider to be reality, and, if so, are those shared foundations or are each of our foundations different, even if only slightly?'

Play is a temporary thing. The third characteristic of play, according to Huizinga, is that it is limited in terms of time and space. When starting a play activity, the players (participants in the play activity) temporarily conform to the starting conditions and adhere to the rules that come from these

conditions. All have physical and temporal boundaries. A piece of the world is conceptually or physically cordoned off and becomes the bounded realm of the play activity; like a football field, chessboard or mountain. The play activity begins. It is *fun*. Then the activity ceases, it stops, play ends. During such time, the player accepts a series of rules and assumptions about the play-world. These rules make up Huizinga's fourth characteristic of play. Failure to stay within the boundaries of time and space or breaking the rules ends the play activity. The boundaries and rules of play are the fundamental laws of the play world. Within the temporal, physical and rule-governed borders of a play activity, serious and important acts occur. Outside of these barriers, or when the barriers collapse, play is or becomes superfluous. The meaning and purpose found in play activities only exist within this context. Play is finite, so all barriers collapse eventually. By limiting play, these boundaries create an ordered realm. For Huizinga (1950), play "creates order; play *is* order" (p.10). This order is the final characteristic that he describes.

To sum up, the characteristics of play that Huizinga outlines are as follows: Play is a voluntary activity, is not real, is bounded physically and temporally, has rules and creates order. Each one of these characteristics complements the others so that they form a kind of mesh of ideas. The unreality of play can best be comprehended through an understanding of the physical and temporal boundaries that are necessary for play; it is literally a space-apart from the rest of the world. Along with these boundaries, the rules of play create the order that Huizinga perceives. These rules are absolutely binding; breaking the rules destroys the play world. This is the magic circle in play; it is the combination and interaction of these characteristics. In Huizinga's words,

> play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is 'different' from 'ordinary life'. (p.28)

Huizinga's definition is accurate, however it could leave the reader somewhat unsure about what is and is not considered to be play. There are three major problems with Huizinga's concept of play that need to be addressed before we move on. Firstly his definition includes far too much as play. Secondly, he alludes to play being an autotelic activity, but he does not discuss this in detail. What is an autotelic activity and what does it mean for play to be one? Finally, it is unclear what kind of a thing play is. What is play and what does it mean to play?

Possibly the most common objection to Huizinga's play theory is that it includes too much. When outlining the characteristics of play, he goes into considerable detail outlining the idea of the 'play-ground', a physical or conceptual space that is cornered off from the 'real' world whenever play occurs. He says:

> All play moves and has its being within a play-ground marked off beforehand either materially or ideally, deliberately or as a matter of course. Just as there is no formal difference between play and ritual, so the 'consecrated spot' cannot be formally distinguished from the play-ground. The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart. (p.10)

From this benchmark, Huizinga goes on to talk about the influence play has had in language, art, poetry, law and order, war as well as rite, ritual, ceremony and civilisation itself. Far from being an argument against his theory, the idea that Huizinga finds "play under nearly ever rock in the social landscape" (Suits 1977, p.117) raises some suspicions. Huizinga (1950) claims this is due to play being pre-cultural, and, therefore, something that helps to form our culture. He says, "[p]lay is older than culture, for culture, however inadequately defined, always presupposes human society, and animals have not waited for man to teach them their playing" (p.1). If this is the case, we might be justified in finding the hallmarks of play scattered throughout our contemporary culture; our rites and rituals, our holy spots and sacred pastimes, our holidays, our very lives. Indeed, what is war but a very real and very violent game? Can we not see the ritualistic play going on in our churches, in our law courts and in our sporting stadiums? Doesn't it feel a little bit like play when you get married, when you celebrate Christmas or when you go to a funeral of a loved one?

Well, no. Certainly we can see the scope of the 'magic circle' *in* culture, but to reduce all instances of *acts apart* to play is a mistake. If we follow this train of thought to its conclusion, it suggests that everything that is cultural is also play. This equivalency reduces play to everything that we call culture, which makes the term 'play' meaningless and confuses it with a mere cultural function. This is what Huizinga is trying to avoid. The whole point of his work is to show that play is not a mere function of anything, but a thing in itself. Further to this, aligning play with culture does not clarify anything; our concept of culture is just as fuzzy. Of course, I don't think Huizinga meant to suggest that play and culture are the same thing. He was trying to point out how play is

independent from our culture, how play helps to sculpt our cultural norms and ideas. The problem is Huizinga failed to distinguish when something is play and when something is 'no longer play but cultural'; when the thing that has no meaning outside the play sphere takes on meaning outside. Because when we look closer, our wars and churches are not acts of play. They are often not chosen and entered into freely. They are not necessarily fixed in terms of time and space and the important and meaningful things that occur within these spaces frequently spill out into the 'real' or 'ordinary' world. The rules we adhere to and the order that we desire is not contained in a space apart; in a magic circle. So while Huizinga's work can be misleading or vague, these objections bring us closer to understanding what play is and why it is so important. Play is more restricted than mere cultural practice, but because of these restrictions it is capable of a far greater freedom.

The second objection concerns plays' autotelic nature. Huizinga alludes to this in several parts of *Homo Ludens*, most frequently when he is summing up the characteristics of play. He says, "[p]lay is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, *having its aim in itself* and accompanied by a feeling of tension, joy and the consciousness that it is 'different' from 'ordinary life'" (p.28, Italics added). It is a voluntary, free activity with its aim in itself.

The point of bringing this up is not as an objection to Huizinga per se, but as a clarification. Huizinga doesn't explicitly state that play is autotelic in nature, but he frequently alludes to it. In more recent papers autotelicity is seen as a fundamental aspect of play. Indeed it is one of its most defining features (Caillois 1961; McGonigal 2011). It could be argued that Huizinga captures this idea sufficiently in his discussion of the voluntary nature of play, but I think a distinction is necessary for clarity. We voluntarily go to work each day, we voluntarily go to the dentist, to the doctor, and do our taxes. To say we do these things voluntarily is to make a claim about the fundamental nature of our freedom; we are ultimately responsible for our own actions. But to suggest we do these things for their own sake is to miss something important. Autotelic behaviour is intrinsically motivated; I value this activity. Voluntary behaviour *can* be motivated intrinsically, but it can also be extrinsically motivated; I value what I get when I do this activity. Riding a bike to get fit and riding a bike for the fun of riding are two very different things, even though the actions look the same or similar. To say play is voluntary *and* autotelic leads us to a solution to the biggest objection to Huizinga's work; the actual nature of play.

The final objection to Huizinga's conception of play is it is unclear what kind of a thing play is. As Carlson (2012) puts it:

> Some of Huizinga's characteristics, such as being voluntary, free, and absorbing the player intensely and utterly, speak of play as an attitude or stance toward things we do. Yet, some of his characteristics are those of activities. For example, when discussing fixed rules and orderliness, he is describing the nature of things we encounter in the world. (p.75)

Carlson came to the conclusion that part of the ambiguity of Huizinga's work is that he failed to adequately define what kind of a thing play is. While all of his characteristics seem valid, some are clearly describing activities while others are definitely not activities. So either some of the characteristics of play are unnecessary for the definition or play is more than just an activity.

Carlson's solution is that we ought to see play as both an activity *and* an attitude. Play is not a static entity. It is not something that can be studied in a vacuum. In order to understand play, we have to study it either by playing or by watching someone play. We have to study an instance of play. Carlson's theory outlines a necessary condition of any play activity; it must be played by someone. Earlier in this chapter, I discussed Lewis's *Meditations.* This phenomenological condition of play, that it must be played to be understood, aligns with Lewis's idea of *looking along the beam.* This perspective gives us what play actually is: Play is an activity that is restricted in time and space, that has rules that construct and maintain order and are, thus, unbreakable. Play is also an attitude that accepts these restrictions freely, that values the particular activity these restrictions create for intrinsic reasons. It is an attitude that sees the freedom in this restricted space, the freedom to change the activity at will; and an activity that is a constructed universe, one that is constructed by someone with a playful attitude. Play is an attitude in the act of constructing a universe by temporarily changing ideas and concepts; the movement of concepts and ideas. Play is an attitude engaged in a temporary, intentional movement of ideas and concepts in order to interact with a particular activity that is valued for its own sake. Play is an ontological opening.

The Grasshopper's Game

In my analysis of games, I will be looking at Bernard Suits' (1978) book *The Grasshopper*. Suits', in a very playful fashion, captures the essence of what a game is through a Socratic dialogue between Aesop's fabled grasshopper and one of his loyal subjects, the ant Skepticus. It is an insightful, thorough and often very playful account of what a game is and why they are important. Playing a game, he says, “is the voluntary attempt to overcome unnecessary obstacles” (p.55). This

is the simplified version of Suits' definition. While it does not convey the full complexity of what a game is, it is a very helpful phrase to have once an understanding of games is reached. Much like Huizinga, Suits breaks down his definition of what a game is, first into characteristics. He says, “the elements of game are 1/ the goal, 2/ the means of achieving that goal, 3/ the rules, and 4/ the lusory attitude” (p.50).

The Goal

According to Suits, there are three distinguishable goals in any game. The first goal is that of participation; I want to play chess. The second goal is of winning; I want to win a game of chess. The third goal that we can discern is that of achieving a specific state of affairs; I want to put my opponent's king in checkmate before he puts my king in checkmate. He notes, however, that

> these responses are not merely three different formulations of one and the same purpose. Thus, winning a race is not the same thing as crossing the finish line ahead of the other contestants, since it is possible to do the latter unfairly by, for example, cutting across the infield. Nor is participating in the race the same as either of these, since the contestant, while fully participating, may simply fail to cross the finish line first, either by fair means or foul. That there must be this triplet of goals in games will be accounted for by the way in which lusory attitude is related to rules and means. (p.50)

Of the three goals, that of achieving a particular state of affairs is the simplest. Suits says, “each of the others presupposes it, while it does not presuppose either of the other two” (p.50). It is a goal that can be achieved independently of the game. I do not have to play chess to get my opponent's king in checkmate. We could start the game that way, or perhaps I am merely moving random pieces around on the board with no idea what I am doing until my friend sitting across from me says, 'stop, you did it. My king is in checkmate! Great game'. This is not playing chess, however, I have achieved at least one of the three goals. As Suits puts it,

> this kind of goal [is] called the *prelusory* goal of a game, because it can be described before, or independently of, any game of which it may be, or come to be, a part. In contrast, winning can be described only in terms of the game in which it figures, and winning may accordingly be called the *lusory* goal of a game. (p.51)

The goal of participation doesn't really figure into much of the definition of a game. It can be seen as another lusory goal, but Suits suggests that it is “a lusory goal of life rather that of games” (p.51). The prelusory goal, then, forms part of our understanding of what a game is because we can understand it without direct reference to any particular game. Lusory goals require an already established knowledge of the means and rules of a game and so are inadequate at this stage. This will become clear as we progress.

Before I move on to the means of a game, I will briefly talk about the term *lusory*. From the Latin term *ludus*, loosely meaning game, lusory is a term Suits uses frequently. As we can see above, the prelusory goal is one that can be described *before* knowledge of the game, or something that can be brought about *without* initiating the game. This is in contrast to the lusory goal, one that only exists within the game. Winning makes no sense without the context of what it is that is being won. The term lusory, as we have seen and will see, is a particularly useful tool in distinguishing between what occurs within the context of a game and what occurs outside or independent of a game.

The Means

This element refers to the means that are permitted in achieving the goal of the game. Depending on which goal you are talking about, there will be a different set of means available to you. According to Suits,

> an extremely effective way to achieve the prelusory goal in a boxing match – viz., the state of affairs consisting in your opponent being 'down' for the count of ten – is to shoot him through the head, but this is obviously not a means for winning the match. (p.51)

What we require are a set of means that allow the lusory goal. Suits calls these the lusory means; they are “means which are permitted (are legal or legitimate) in the attempt to achieve prelusory goals” (p.51). Lusory means, then, are restricted. If we think of all the means possible in achieving the prelusory goal, the lusory means would be a set derived from that set. But, what decides which means are permitted and which are not? The rules of a game serve this function.

The Rules

The rules of a game split into two kinds, constitutive rules and rules of skill. The constitutive rules are the more important because they are, according to Suits, “proscriptions of certain means useful in achieving prelusory goals” (p.51). This kind of rule, he says, “may be called constitutive of the game, since such rules together with specification of the prelusory goal set out all the conditions which must be met in playing the game” (p.51). The other kind of rule is the rule of skill. This outlines how to play the game well; “To break a rule of skill is usually to fail, at least to that extent, to play the game well, but to break a constitutive rule is to fail (at least in that respect) to play the game at all” (pp.51-52). As we are looking for a definition of games and not well-played games, our focus and that of Suits' is on constitutive rules as these are the rules which “determine the kind and range of means which will be permitted in seeking to achieve the prelusory goal” (p.52). The rules, therefore, permit certain means to be available in achieving the prelusory goal, whatever that might be; this is the nature of a game. To play a game is to commit to attempting to achieve the prelusory goal while at the same time adhere to certain rules that limit the possible means that can be used in achieving said prelusory goal.

The final comment Suits makes concerning the rules of a game are quite important. He says, “the simplest, easiest, most direct approach to achieving such a goal [prelusory goal] is always ruled out in favour of a more complex, more difficult, and more indirect approach” (p.52). The constitutive rules intentionally restrict the most efficient means of achieving the prelusory goal. This is one of the most striking things about games. With any other goal in life, efficiency is sought after. Our continual pursuit of better technology is a testament to our desire to have goals accomplished faster and of a higher quality than ever before. And yet, in our games we are continually undermining our abilities to do so, or so it seems. In games, we make things harder and take longer. We do this intentionally. If we think a game becomes too easy or short, we find ways to prolong the game or increase the difficulty. We do this on purpose. We may, Suits says, “therefore define constitutive rules as rules which prohibit use of the most efficient means for reaching a prelusory goal” (p.52).

In order to account for this bizarre behaviour, a fourth element in the definition of a game is necessary; the lusory attitude. This, I contend, is the most important part of what a game is. The activity of a game as outlined above is something that defies common sense. If we have a goal we want to achieve, why would anyone want to make that harder to do? Why does the lusory goal exist at all?

Lusory Attitude

According to Suits, “the attitude of the game player must be an element in game playing because there has to be an explanation of that curious state of affairs wherein one adopts rules which require one to employ worse rather than better means for reaching an end” (p.52). This is counter to how we would usually behave when better means for achieving certain ends are ruled out only because of some undesirable side effect. For example, nuclear weapons are highly efficient at winning wars, however, they are ruled out due to the unpleasant side effects of nuclear fallout and total annihilation. In the case of games, this is not so. Less efficient means are used because more efficient means have been prohibited by the rules. As Suits points out, this is a terrible justification for anything.

> The justification for prohibiting a course of action that there is simply a rule against it may be called the *bureaucratic* justification; that is, no justification at all. But aside for the bureaucratic practice, in anything but a game the gratuitous introduction of unnecessary obstacles to the achievement of an end is regarded as a decidedly irrational thing to do, whereas in games this appears to be an absolutely essential thing to do. (p.53)

What, then, can we say about the lusory attitude? We can say that it is absolutely necessary in order to play any game, because without this attitude there would be no reason to do so. There would be no point. Indeed, these are the sentiments expressed by anyone who has sat and watched someone play a game. 'Why are you doing that? What's the point?' The game player (also known as a gamer) doesn't want to just achieve the prelusory goal. Often the prelusory goal by itself is something menial or pointless. The gamer wants to achieve this goal while conforming to a set of rules that prohibit certain means. She accepts these rules, *“just so* the activity made possible by such acceptance can occur*”* (p.54, italics added). It is a desire to attempt to overcome unnecessary obstacles. It is neither the prelusory goal, nor conforming to certain rules per se that is important. The point of playing a game is the complete experience; the reason we play games is so that we can play games. We want to achieve the prelusory goal while conforming to means-limiting rules. The attitude that makes such activity possible is the lusory attitude.

> To play a game is to attempt to achieve a specific state of affairs [prelusory goal], using only means permitted by rules [lusory means], where the rules prohibit the use of more efficient in favour of less efficient means [constitutive rules], and

> where the rules are accepted just because they make possible such activity [lusory attitude] ... Playing a game is the voluntary attempt to overcome unnecessary obstacles. (p.55)

In my view, it is the lusory attitude that is of the highest importance when we talk about games. While the other three elements of a game, the goal, the means and the rules, combine to give us the structure and nature of a game, it is the attitude of the gamer that makes the game happen. We can describe the goal of chess, the means employed and the rules that must be followed but without an active participant with a lusory attitude the chessboard would surely go unused. This brings us back again to Lewis in his toolshed. The three elements of what a game is can give us a fine description of what can and cannot happen in a game. We can safely *look at* this framework in isolation as a static entity and call it a game, but the true nature of the game will not be revealed. Only when looking along a game, only when it is played, can it be understood. There is no longer 'the game of chess' to study, there is 'a particular game of chess' or '*this* game of chess' to interact with. It is the lusory attitude that changes games from uselessly difficult, pointless time wasters into engaging and challenging activities that are valued for their own sake. They create their own value.

Attitudes

Suits' lusory attitude and the playful attitude derived from Huizinga's work are the key elements in understanding both play and games. At the beginning of this chapter I made a claim about play and game attitudes that I can further explain now. In both play and games the attitude of the gamer and player are integral to their respective activities. Without this attitude all the elements of games and of play could be studied in an isolated, static environment. These elements could describe a great deal about the nature of play and games, what constitutes them and how they differ from other activities. However, it is the attitude that brings these elements together. We could study play for a lifetime (*looking at* the beam), but without the playful attitude (*looking along* the beam) we would never actively engage in play and therefore would miss out on a vital element of play; the why. Why do we play? Why do we play games? I contend that our desire to play can tell us a lot about what motivates us, how we learn and why, how we see ourselves, and even how we interact with the world. These themes will be dealt with in the next few chapters, but for now there is more to say about these curious attitudes.

Carlson (2011) follows a similar line of reasoning. His paper, 'The 'playing' Field: Attitudes, Activities, and the Conflation of Play and Games', has two main thrusts; that play and games both

comprise activities and attitudes, and that both play and games are separate entities that ought not be conflated. Of the two points at issue, I am far more interested in the idea of play and game attitudes and activities. However, I will briefly talk about the conflation of these two concepts.

Carlson's paper begins with an analysis of Huizinga's (1950) *Homo Ludens*, Caillois' (1961) work *Man, Play and Games*, and Suits' (1978) *The Grasshopper*. Much of this paper mirrors what I have already covered in this chapter so far. His conclusion is that Huizinga and Caillois confuse the terms play and games frequently, and as such end up using them interchangeably. Of Suits' work, Carlson claims his definitions of both play and games easily lead to a conflation of the two terms if misunderstood, even though Suits himself makes a distinction between the two. From this platform, Carlson (2011) claims that, far from being equivalent terms, play and games ought to be thought of as completely separate: “One can be at play but not in a game. And conversely, one can be in a game without also experiencing play” (p.77). Both, he says, “play and a game may be experienced together if one is voluntarily participating in an unnecessarily challenging activity for its own sake” (p.77). It is here that I must pause and consider this statement because it seems mistaken to me. I can agree that not all play is a game. Play is a broader, more inclusive term that need not be restricted to games only. However, I cannot envisage a game that is not play. My intuition is that games are a type of play; that games exist and occur within the realm of play. But perhaps I am mistaken. For clarity, I will take a brief detour from Carlson back to Suits, to a paper on just this subject, 'Words on Play'. Suits (1977) says:

> In contending that playing and playing games are logically independent, I mean that, even though game-playing very often *is* playing, one cannot conclude that *because* X is an instance of playing that X is therefore an instance of game playing, and also that one cannot conclude that *because* Y is an instance of game playing that it is therefore an instance of playing. (p.120)

This gives Suits a logical starting point to the idea that play and games are independent. As I have said above, I have no problem accepting that not all play is game play. It is the other assertion that not all games are play that is at issue. Suits puts forth an example that he believes shows this independence.

> When professional athletes are performing in assigned games for wages, although they are certainly playing games, we are not at all inclined to conclude from that fact that they are without qualification playing. For we think of

> professional athletes as working when they play their games and as playing when they go home from work to romp with their children. (pp.120-121)

However, there is a flaw in this argument, which I will now go through step by step. Professionals can be participating in a game, (say, tennis) while at the same time not being in play; while not playing because he is at work. My issue concerns the attitudes at play here (so to speak). As Suits said above, one of the key elements of any game is the lusory attitude. The lusory attitude is all about seeking challenging, unnecessary obstacles to overcome. However, professionals, according to Suits, are working when they play the game. They are working for their wage. This leads me to the conclusion that the elements of tennis hold no unnecessary obstacles for the professional; the rules of tennis and means allowed by the rules are just part of the job. What I am suggesting is that in this case, the professional cannot be said to be playing a game because they are not engaging in a game at all. Their opponent may be playing a game, the spectators are likely to be watching a game, but in this instance the professional is *not playing a game.* This is because the professional does not necessarily have a lusory attitude anymore and so, by its very definition, whatever the professional is engaged in, it is certainly not a game.

The logical conclusion to this is that professionals cannot play games, they are merely working and only amateurs play games. But I don't think we need to jump off that cliff just yet. All we really need is to reinsert the lusory attitude into the professional's life, or at least the possibility of having a lusory attitude. The lusory attitude is about unnecessary obstacles. The only reason I can see to want to overcome unnecessary obstacles would be if you valued just such an undertaking. The professional would need to value playing the game for the sake of playing the game. There is an attitude that accomplishes this goal that seems to be connected to the lusory attitude; the playful attitude. The playful attitude, values activities for their own sake, and it is my claim that in order for the lusory attitude to make any sense, one must also have the playful attitude. To put this another way, the lusory attitude acts in tandem with playful attitude; it is a more refined and specific kind of attitude tailored towards more refined kinds of play activities, namely games.

It is now finally time to amble back to Carlson's (2012) paper to inspect a diagram of the relationship between play and games (see Figure 1). His second major claim, following his analysis of Huizinga, Caillois and Suits, is that both play and games can be split into either activities or attitudes. He says, “[p]lay and lusory attitudes are manners in which the world can be engaged. Play activities and games are objects in the world that can be so engaged” (p.80). Carlson doesn't say in

his paper which is more important so it stands to reason that he thought they are of equal importance.

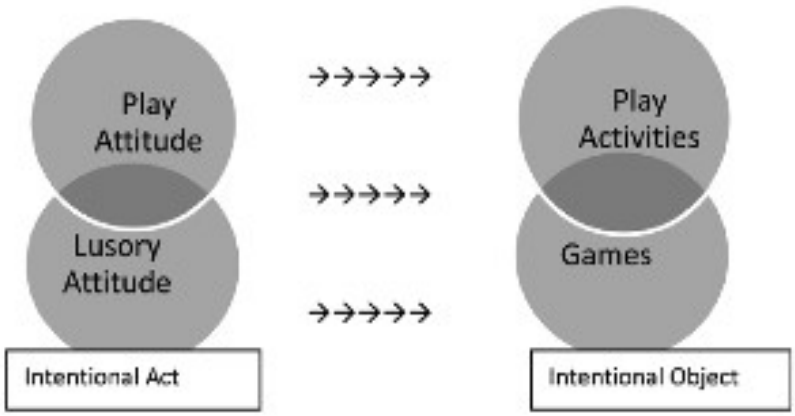

Figure 1: – Carlson's (2012, p.79) venn diagram depicting the relationship between play and games.

Given the above conversation, I think this diagram is in need of a slight revision. If we accept that the lusory attitude is a subset of the playful attitude, we must also accept a few other things. Firstly, without the lusory attitude, a person cannot play a game. There may be a game being played and they may be a part of it, but without this attitude it cannot be said that they are playing it. Consider two brothers playing chess. Charlie loves chess and that is why he is playing his brother, Rick. Rick, on the other hand, has been asked by his parents to play chess with Charlie and doesn't care much for chess or any game. Rick was convinced to play with Charlie only because his parents paid him for his time. So while Charlie is playing chess and having a wonderful time, Rick is essentially doing the job of babysitting; Rick is not playing a game. Given this, I would like to replace what is in Figure 1 with a new diagram (see Figure 2).

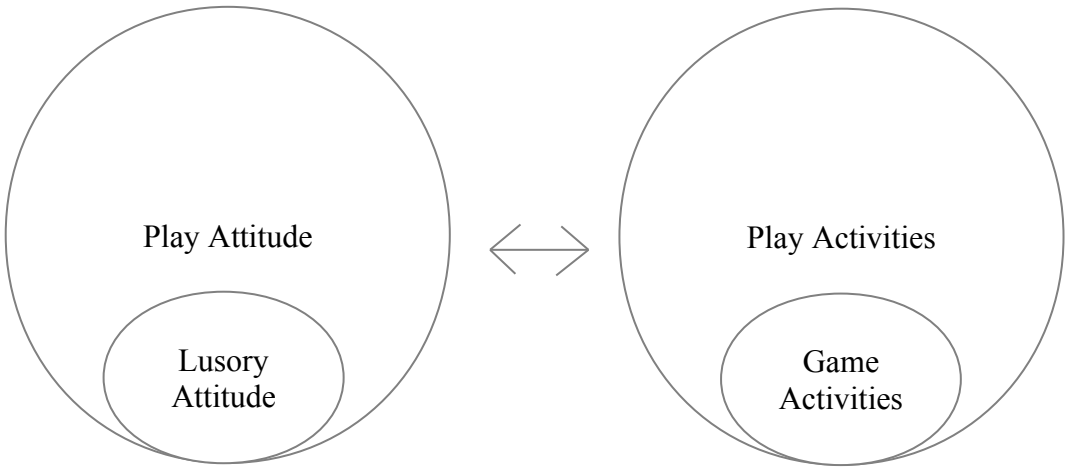

Figure 2: Venn diagram depicting the relationship between attitudes and activities

Figure 2 shows the lusory attitude and gaming activities as both subsets of play attitudes and play activities respectively. While both Suits and Carlson would disagree with this arrangement, it makes sense to think of the lusory attitude as dependent on the playful attitude, because without it, the lusory attitude makes no sense. When we *look along* play and games they are inseparable. While in a static environment play and games seem to be able to be pulled apart, however phenomenologically speaking, they function only while together. In the next chapter I will develop this idea by looking at the attitudes and identities of game players and how this relates to education.

Chapter 2

Games and Domains: Identity and Education

The previous chapter highlighted the importance of attitudes in games and play. If the most important aspect of a game is the attitude of the gamer, what does that say about the activity of games? It says the activity only matters in so far as it can encourage the required attitude. When talking about play the activity is almost superfluous. Almost any activity can become playful with the right attitude. Games, however, are much more specific. Activities that are classed as games are unique in that they demand the correct attitude. This is a forceful act. How well this works is an indicator of how good a game is. A failure to evoke the correct attitude necessary to play can be a fatal flaw. Good games, then, are ones that can successfully convince players to take on the necessary attitude for game-play to occur.

There is a force in games that is absent from more general forms of play. When we play, it is our playful attitude that turns our monotonous day job into a fantasy wonderland; or our desperate fight for survival lost in the wilderness into a nature trek; or jumping out of a plane and having a heart attack before praying a thin sheet plastic deploys in exactly the right way that would be necessary for my continued existence into skydiving. In these scenarios it is my attitude, and not the ridiculous activities, that drive the situation. Without my attitude I might still find myself bored or lost or falling out of a plane; I just wouldn't be playing. Games are different. The game activity is forceful in that good games convince the player to take on a certain attitude (and thus, play the game). This forcefulness is why my focus is on games and not on other forms of play. Whereas general forms of play are usually directed by the individuals' attitude, games (or at least good games) *evoke* an attitude. Games affect us. When we choose to play a game, we choose the attitude that is required to play. If we don't, we will simply not choose to play the game at all.

The reason why I am interested in the forcefulness of games, or the connection between games and play, or just the sheer joyfulness of play at all is that I think games are powerfully coercive, and yet voluntary. Games are powerful in the sense that, as a subset of play, they are an opening. They are a physical opening that allows action to occur. They are a conceptual opening in that they allow a domain of knowledge to exist. They are an opening of our ideas and beliefs in that they have the power to suspend them, at least temporarily, so that other ideas and beliefs can exist. Games represent the pinnacle of one of our most fundamental abilities; our ability to learn. In this chapter, and following up in Chapter 3, I will argue that games connected to our ability to learn in

fascinating and important ways. I will argue that the playful attitude presents the individual with a unique way of looking at, and interacting with, the world. Firstly, I will focus on a critical analysis of Gee's (2007) *What Video Games Have To Teach Us About Learning And Literacy*.

The 36

Gee (2007) offers up 36 distinct principles of learning derived from good video games. Before we look at these principles, some things need to be unpacked. Firstly, you will notice that I have been talking about 'good' video games. What makes a game 'good' is something that I will define in this chapter in terms of its characteristics. One aspect of this definition is the forcefulness I alluded to above. I will discuss this in further detail shortly. Another is that good games are simply games that embody the principles of learning well. For example, when a game fails to teach the player how to play, the player will most likely not continue to play the game. All games to some extent will embody some or all of these principles; it is just some of these will do so badly. The reason, then, for focusing on 'good' games is that it shows the potential that games have as learning activities. It is not the games themselves, but their structure and potential that Gee (and myself) are highlighting.

Secondly, I am working with a particular kind of game, the video game. I am doing this for the same reason I am focusing on good games, to highlight the theory behind the game. This is not to say that other games don't also have good learning principles, it is just that video games exemplify these principles. There is also an element of personal bias here. As a child, and then a teenager, and even sometimes as an adult now, I have been inspired or coerced into action by games. The driving force behind this research and my life generally is to ask why video games succeeded in inspiring, motivating, or coercing me into action where most educational institutions have failed to do this. This also raises another question. I have since found a similar inspiration in the field of philosophy and the result is the document you are currently reading. The question is what do video games and philosophy have in common? I will give an answer in the next chapter; it is a question that is best understood once the connection between video games and learning is uncovered.

Thirdly, I will be dealing with the main themes, as I see them, of Gee's principles. I will not look at each principle and analyse each in isolation here. In later chapters I will discuss specific ideas such as pedagogy and the social and extended mind. In those conversations Gee has much more to say, and I will address the specifics there. Gee presents us with an entire system for learning; this is what I want to discuss in this chapter. I will, therefore, be focusing on two of the major themes of this system, which are:

1. The Identity of Gamers and Learners
2. Communities of Learners

Finally, I will look at Principle number 27, the *On demand and Just-In-Time Principle* from Gee. This principle states that "[t]he learner is given explicit information both on demand and just in time, when the learner needs it or just at the point where the information can be best understood and used in practice" (p.226). Information is given when needed. This is not to say that anything is withheld, as all information is freely given if requested. Games function on this principle so that they don't overload the player with too much information. This applies not just to the rules of a game, but to in-game information like storyline, game mechanics, strategies, histories and more. It also applies to any form of learning. This principle will apply to the following discussion. It will help to shape this chapter and dissertation. By following this principle, I present my dissertation in a way that embodies this principle. According to Gee,

> [r]eading and writing in any domain, whether it is law, rap songs, academic essays, superhero comics, or whatever, are not just ways of decoding print, they are also caught up with ways of doing things, thinking about things, valuing things, and interacting with other people – that is, they are caught up with different sorts of social practices. (p.18)

Gee's book is primarily about how we learn. The first six principles that Gee discusses are about understanding the very basic conditions necessary for a good learning environment. Understanding reading and writing for Gee is the first element of this environment. Reading and writing is about decoding, understanding, creating and manipulating information. Let's look at this in more detail.

The various symbols that make up our written language need to be decoded to be read. We need to know what each letter or symbol means individually and combined in order to extract the information it is representing. In this very sentence, I am relying on a set of symbols from a set we call the English language to convey my meaning (about meaning). But even in this simple context, how I am conveying meaning is relying on much more than just this set of symbols. I am also using a complex network of rules and social practices that make up the written English language, such as grammar and punctuation. The rules and practices that I am adhering to here are even more specific because as I am also writing in an academic context, and as such my symbol manipulation ought to represent a much more formal tone. The idea of a formal tone, of course, is itself referring to and working within a set of practices about language. And it goes on like this.

The point of this extreme close-up, meta-analysis of a sentence is that the process of both conveying information (writing) and receiving information (reading) is entirely contextualised. How we read (understand) and write (convey) information is vitally important to understand if we are to learn anything. As the above example tries to point out, any language we use to read and write is situated within a set of rules, practices, ideals, and beliefs. This applies not only to written and spoken language, but to any way we 'read' and write', e.g., images, sculpture, interpretive dance, theatre, games, graffiti, fashion, body language, or facial expressions. A good example of this is when translators find words that are untranslatable from other cultures (read: from a different set of rules and practices). Let's look at the following illustration:

> Goya. This Urdu word, of Persian origin, apparently describes 'the suspension of disbelief that can occur, often through good storytelling'. In fact, it simply means 'it is said', equivalent to 'apparently'. Used in telling tales, certainly, but the translation picks up the associations of the word, rather than its meaning. (Shariamadari 2014, p.1)

While we can directly translate the exact meaning of the word *goya*, this does not translate the meaning of the word as originally used. Anything that conveys meaning, anything that has meaning that we can decipher or encrypt (read or write) is going to be situated (or be situated by us) in what Gee calls a semiotic domain; a collection of rules, practices, ideals, and beliefs.

If I were to tell you that I am a Level 65 Wood Elf who prefers light dragon scale armour over the stronger but heavier dragon bone armour, you might have very little idea about what I am talking about. The fact that I'm a Wood Elf and not a High Elf is a distinction I could force you to memorise. If I tested you on it at a later date and you had memorised all the information about the Elves perfectly, you could pass a test about the differences between different Elf races. But you would have no use for this raw and un-situated information. It is useless to you. However, if I explain that I am describing my character from the game *The Elder Scrolls V: Skyrim* then the distinction between what kind of Elf I am can become more meaningful. As a Wood Elf I have an inherent resistance to both poison and disease (unlike High Elves). Culturally speaking, Wood Elves are much less despised than High Elves (due to certain political affiliations). My point is that within the world of *Skyrim* this information is useful. The term 'Wood Elf' is only meaningful in certain contexts. I could start calling myself a Wood Elf around the office or in the street, but this would carry no meaning, or worse, the wrong meaning. In *Skyrim*, however, calling myself a Wood

Elf calls out one trait of my avatar. 'Wood Elf', as a term (or symbol) has been decoded and understood in the context of avatar races in *Skyrim*. I can now use this term in meaningful ways within *Skyrim* because *Skyrim* is the semiotic domain in which this information becomes useful knowledge. According to Gee (2007):

> Because literacy requires more than being able to 'decode' (words or images for instance) and because it requires people to be able to participate in – or at least understand – certain sorts of social practices, we need to focus on not just 'codes' or 'representations' (like language, equations, images, and so forth) but the domains in which these codes or representations are used, as well. We need to think in terms of what I will call *semiotic domains*. (p.18)

All knowledge is situated in some semiotic domain. For example, a straw man in the semiotic domain of philosophy is the name of a logical fallacy that appeals to an analogy used to describe an easily defeated opponent that has been created to make an argument look stronger than it really is. Straw men are usually not a good thing to appeal to in a scholarly philosophical paper. However, in the semiotic domain of farming, straw men quite literally are men made out of straw that are used to scare away birds. I assume straw men in this context are not judged to be as bad as the philosophical kind is. In the semiotic domain of the movie *The Wizard of Oz* the straw man is one of Dorothy's companions, the one with no brain. A critical analysis of the straw man will show he is kind and loving, and generally represents the emotional heart of the group; basically everything the tin man is missing. In this domain, the straw man has a very different meaning indeed.

This gives us a picture of a world populated by semiotic domains. These domains come in many different sizes, they overlap, and most are contained in other more complex domains. The domain of philosophy, for example, is quite large. Within philosophy are domains such as metaphysics, epistemology, logic, existentialism, pragmatism, and idealism. The domain of psychology is one that intersects and sometimes overlaps into philosophy, and vice versa. The larger domain of contemporary academia encompasses all of these domains, and much more. In another example, the domain of Grand Slam tennis tournaments exist in a larger domain of tennis (generally), and an even larger domain of sports. Everything that carries meaning is situated in a particular semiotic domain. The first step to learning anything is identifying which semiotic domain(s) give it meaning.

The Domain of a Game

Gee argues that video games *invite* the player into their semiotic domain. This, I contend, is an overt and forceful act. However, as mentioned in the previous chapter, only those who choose to play voluntarily are able to play. Games draw us into their domain. They present themselves as different from the actual world in which these games exist; here is a medieval fantasy land, here is our world overrun by zombies, here is the future, here is the past. Games never present themselves as anything but games.

Entry into the semiotic domain of a video game doesn't cost us anything. In contrast, other semiotic domains appear to ask something of us, or at least we think this is the case. Semiotic domains are made up of the ideas and ideals of a set of practices. For example, it is not some arbitrary pile of content that makes up mathematics but the set of ideas, ideals, beliefs, norms, and practices of each member of the semiotic domain of mathematics. It is not made up of facts like 1+1=2, but in the idea that the symbols 1, 2, +, and = have certain meaning. Concepts like addition and subtraction have a certain power in the domain of mathematics that they don't have in other domains. These symbols and concepts can combine in different ways to make meaning. Members of this domain (mathematicians) who adhere to these practices generate the content of their domain. Given this, adherence to a particular semiotic domain requires, at least partially, an acceptance of these practices. We need to become mathematicians, if only temporarily, in order to do mathematics. The perceived cost of studying mathematics is acceptance of the semiotic domain of mathematics as a truth. This perception is a very large hindrance to our learning. Just as knowledge of mathematics is situated in the semiotic domain of mathematics, so, too, are people situated in some semiotic domain(s) or other. Conflict between the domains that give us our beliefs can lead to internal conflict. If, for example, I think of myself as bad at maths, I am identifying with a semiotic domain that says that some people are bad at mathematics no matter how hard they try. This domain is in direct opposition to the idea of a maths classroom. I cannot, based on the beliefs of both groups, be a member of both. Students who find themselves in this position (for any number of subjects) don't actively choose to align with these domains, and as such they do not see that they can make a choice in what they believe. How then, do gamers 'buy in' to the semiotic domain of a game more easily than that of mathematics, or English, or any number of subjects? Gee's answer to this problem lies in how we interact with semiotic domains.

I am a philosopher. This is not dependant on any particular level of education that I have achieved, nor is it based on the number of publications I have or the amount of times I have spoken at

conferences. I am a philosopher because I exist, in part, in the semiotic domain of philosophy. As an undergraduate student, this amounted to a form of imitation. I read the philosophical texts other philosophers had read and had written. I discussed problems in the same manner and format as other philosophers. I wrote (or attempted to write) my own philosophical theories, or at least critiques of other theories. I imitated the ideas, practices, beliefs; the *grammar* of the semiotic domain of philosophy. Over time, I stopped imitating what I thought philosophers did, and just acted as a philosopher. I had accepted much of the ideas and social practices that were valued in the semiotic domain of philosophy because I agreed with them. The ideals of philosophy became my ideals, at least partially. Much like that of a good game, however, I was not *unknowingly* coerced into anything. At each point in the imitation *I* was present; it was me who was imitating, it was me who chose to imitate other philosophers because that is what I wanted to be. Finally, it was me who, when I stopped imitating, held many of the beliefs and practices from the semiotic domain of philosophy. I created an identity as *Liam the philosopher* based on everything that I knew about the semiotic domain of philosophy. Identity plays a big role in how we interact with semiotic domains.

There are three identities that play when we play according to Gee (2007): the virtual, the real-world, and the projective. All three, he says, “operate together, at once, as a larger whole” (p.49). The real-world represents what we know and who we are. When I play a game, what constitutes my real-world identity is everything *I* bring to the game. The virtual is the opposite of this. When we play, our virtual identity is everything we are not (but still act as). Our virtual identity is our in-game selves. It exists as a part of the game; the way we interact and exist in the game. For any game that we choose to play, we need a virtual self that allows us to do so. Because of this our virtual selves are temporary. Our avatar, which is our presence in a video game, is the best presentation of this. The projective identity is separate from both real-world me and virtual me. It is best understood as embodied intention. It is a collection of desires and ideals that I have for myself. It is what real-world me wants virtual me to become.

When we play, we act from these three identities simultaneously. They are inseparable, except conceptually. Gee refers to this as a triple identity, however, it more accurate to think of this as these three selves acting as one identity. It is this unique formulation of identity that allows gamers instant access into the semiotic domain of the particular game they are playing. When we play, our real-world identity doesn't have to buy into the domain of the game because our virtual identity already has. Our virtual selves exist solely in the domain of the game.

I said the real-world is everything I bring to the game and the virtual is everything that is not me, but this is not entirely accurate. The virtual is, in a very real way, a part of who I am. It is just a temporary part. My virtual self allows me to be something I am not. When I play a game, I assume the role of the character I am playing. This is an imitation; I act like my character when I play. This is how the virtual identity gives the player access to the semiotic domain of the game. When we play as a character in the game, *we are playing as someone who identifies with that semiotic domain*. We temporarily take on the social practices, beliefs and ideals of someone who is a part of this semiotic domain.

The real-world and virtual identities interact in interesting ways. The temporary nature of the virtual (all games must end) makes it easier for my real-world self to accept some level of contradiction in my beliefs while I am playing. For example, I am a pacifist. I believe there is something fundamentally wrong about killing another person. Yet, frankly, many of my virtual selves have been serial killers. I have no problems with killing in a game, provided my virtual self is the kind of person that kills. This is because the virtual me is both me and not me, in an important sense. As Gee points out, "[t]he successes and failures of the virtual being Bead Bead (me in my virtual identity) are a delicious blend of my doing and not my doing" (p.49). This is not a hard line. The player's virtual self (or virtual identity as Gee calls it) is different from his or her real-world self in that the virtual self exists in a different semiotic domain. However, the real-world and virtual selves are still connected; they are both still instances of the player.

When I act in a game, I as a player (a gamer) do so at a distance. That is to say, it is not the real-world self, but the virtual self—either seen through the eyes of the playable character or represented as an avatar where the player can view their virtual selves on screen—who acts at the request of the real-world self. Furthermore, the player's control of the virtual self is a temporary thing. The player only has control when playing the game. However, while the player is not the virtual self, the player does control, embody, and make decisions for the virtual self, as well as gives the virtual self goals to follow, and morals to uphold. Without the real-world self, the virtual self does not exist. It is tempting to say that the player is not responsible for the actions of the virtual self, but it is far more accurate to say that the actions of the virtual self only apply to the player, because *I am my avatar.* When we take on a virtual identity to play a game, we are assuming a character. Some of the time this is an empty vessel. Skyrim, Fable, Fallout, World of Warcraft; these games give us a wide range of customisation options for our character. Sex, race, creed, appearance, attributes, skills and other statistical information is all up to the player. Other games like The Legend of Zelda,

Infamous, and The Last of Us, have characters already built into a more structured storyline for the player to assume the role of. In both cases, the player still assumes as role that is not herself.

Red Dead Redemption (RDR) gives us a clear example here. RDR is set in 1905 on a fictional last frontier of the American west. It is a 3rd person action game that sets the player in an open-world western where the player hunts bandits, gets into gun fights, rides horses, saves homesteads, and much more. For those who do not play games, I will briefly explain a couple of these characteristics. Firstly, a 3rd person game refers to where the camera is, and, therefore, what you see when you play. A 3rd person angle has the player viewing the action from behind and above the playable character. A 1st person perspective game, by contrast, is one where you see through the eyes of the playable character. In these games, the player will not see all of the playable character, but will see their arms and whatever is in their hands, e.g., guns or tools. The idea being, 1st person games have the player seeing the world as if they are really there, whereas 3rd person games show the playable character as an avatar as he or she interacts with the world, giving the player a more detached view. In a 3rd person game, the virtual identity is easily identifiable because there is an avatar that the player can see and control. In 1st person games, the player sees the game world 'through the eyes' of their avatar.

Secondly, RDR is an open-world or sandbox game. Sandbox games are non-linear. Most games have a straight forward progression. Start at point A, accomplish task B, C, D, move to position E, and so on. Each step opens up the next task to perform, and all of these tasks lead directly to finishing the game. This is a linear game. Non-linear games stray from this formula. Some non-linear games give the player multiple sets of options for how to play the game or how to progress. Some non-linear games even have randomly generated content, that is, enemies, landscapes, puzzles, or missions that are not specifically crafted by the game designers. Randomly generated games have a chaotic element to them, so that each play-though is different; different events occur in different orders and different levels of difficulty. Sandbox games are different again. They are non-linear in that there is no one path to follow in order to finish the game. Sandbox games are a world where players can choose how they act and play. For example, in RDR there are several different missions the player can choose to undertake at any given moment. Some will progress what is called the main storyline, whereas others will progress mini stories that are not directly relevant to the main storyline. There are also many missions that do not add to any significant storyline at all. Aside from this, the player might choose to not follow any of the missions RDR, and instead go off hunting or exploring in the game world. Sandbox games are designed so that players can approximate what living in a world would be like.

In the world of RDR, life is harsh and easily taken away. In the open world of this game, random mini story lines pop up from time to time. They don't add to the main quest, but add to the mood and realism of the game, and offer the potential for minor risk and reward. They usually consist of saving someone or finding some object that has some value. In one such scenario, the player will be riding along the road and come upon a woman next to a broken wagon asking for help. If you stop, you are greeted with an ambush. Four armed bandits emerge from behind the wagon and the woman flees laughing and mocking your naivety. This is a kill or be killed moment, and not one that presents much ethical pondering as far as I can see (we are in the 'Wild West' after all). Survive the ambush and an opportunity pops up. The woman who hailed you over in the first place begs for you to spare her life. You are given the choice to either kill and rob the woman (she has a few coins, not many) or let her go. Dispatching the bandits is not seen as a bad act in the game, after all they attacked first and *they're bandits.* But this woman is unarmed and pleading for her life. She claims she was kidnapped and forced to help in the ruse. If another non-player character (NPC) sees the player kill this woman, they will go to the sheriff and put a bounty on your head. If no one sees you, you can get away with the murder.

First, if we are going to look at the ethical decision presented to us, we must first understand in which semiotic domain it exists. Your playable character is John Marsden, a reformed bank robber. He was a bad guy but, as the title suggests, he is looking for redemption. In this world of kill or be killed, mercy is hard to find. The people are hard but fair in their own way. In this scenario, you do not go out of your way to find death because you are actually trying to help someone. In doing so, you are almost killed. As John Marsden (playable character) you are not a tourist, but a citizen of this world. As such, John is the kind of person that has killed people before.

The playable character, as a virtual self, works like a well tailored suit. While in it, the player can assume a role of a virtual self. But it is still the player who is acting. The real-world self still has influence on the virtual self. How we achieve this is through what Gee (2007) calls the projective identity.

> In my projective identity I worry about what sort of 'person' I want her [Gee's virtual character Bead Bead] to be, what type of history I want her to have had by the time I am done playing the game. I want this person and history to reflect my values, though I have to think reflectively and critically about them, since I have never had to project a half-elf onto the world before. (p.51)

The projective identity represents the kind of person that we (the players) are trying to be when we assume the role of a virtual person (the playable character or virtual self). When we play RDR, the virtual self is John Marsden (the playable character). The projective identity consists of what the player wants John to be and how he or she wants him to interact with the world. The players projective identity acts as a guiding ideal for the virtual self. It is how the real-world self effects the virtual self. It is also how the real-world self identifies with the virtual self. How close or far the virtual self drifts from the projective ideal directly influences whether or not the real-world self will continue to identify with the virtual self. If, as John Marsden, the player kills the woman who had tricked him or her into an ambush, the real-world self will react either positively or negatively. The first time I came across this ambush scenario, I killed the woman and robbed her. I felt justified because she had been just as much of a threat as the bandits. Instantly I felt bad. I had just killed an unarmed person who was begging for mercy. I found $4 on her person. The real-world self did not like the kind of person the virtual self was being. From this moment on, my projective identity developed the concept of mercy, which was enforced wherever possible. The next time this scenario came up, I let the woman live, and felt I had done something as the playable character John Marsden (virtual self) that I, as Liam (real-world identity), would be proud of. This sequence of action, reflection, alteration and continued play helped to forge a stronger connection between the real-world and virtual selves that are me (Liam). My projective identity altered the course the virtual self was on because of the real-world self. Games like RDR require that the player continue to identify with their playable character (as a virtual self) so that they continue to play the game to the end. We can even identify this as another trait of a good game. Forging strong connections between the real-world and virtual identities allows for future action. We forge stronger connections through the projective identity by sharing our core ideas, ideals, beliefs and practices. By the end of my play-through of RDR, I felt *my* John Marsden, i.e., the John Marsden that I was controlling, was a part of myself. In other words, my virtual character was who I wanted him to be.

This happens in every game the gamer plays. However, it is much more explicit in some games than in others. In every game our virtual, real, and projective identities interact to allow us access to game worlds. Sometimes those worlds are simple or abstract, making identifying with parts of the game difficult. For example, it is difficult (but not impossible) to locate the virtual self and projective identity in puzzle games like Tetris. This is because there is no character to control, no entity that is identifiably the player. Instead, Tetris, and games like it, are abstract experiences where the player manipulates geometric shapes and places them in specific spots. The playable character, in this case, is simply the entity that can control these shapes. In Tetris, the player

identifies with the actions he or she performs. It is similar to a 1st person game, where there is no visible avatar which the player identifies as the playable character. There is still some identification going on. It is more generalised, but the player still feels as though their actions in the game are the actions of someone. The player still refers to a game of Tetris as my game or my play-through. However, games that give us something to identify *with* as a virtual self, whether machine, person, or animal, in either a 1st person or 3rd person game, strengthens the idea that the virtual self is something and someone specific, and that that specific entity is the player. It is far easier in games like *Skyrim*, RDR and other RPGs (role playing games), simulation games, and some action/adventure games because these games give us playable characters with which players can easily identify; there is compatibility between the player's real-world self and virtual self. Therefore, while I maintain this idea of identities applies to all games, it is more significant in some genres. It is these games that we can learn the most from. In the next chapter I will discuss how this relates to the Deweyan notion of communities of learning, but in short these are similar in construction to semiotic domains. Identifying with these communities or domains is how we become members of them.

I would also like to point out how similar this is to the thought experiments philosophers so often employ to make a point. A great deal of ethics, logic, and some metaphysics are discussed using thought experiments; made up scenarios that follow the same principles as our world to test hypothetical situations. How similar games are to thought experiments is an indicator to how close games are to philosophy, which is something I will discuss in the next chapter.

What then, does this have to do with learning and education? According to Gee, the triple identity works so well in video games because it is educative in nature. By properly understanding semiotic domains and how we interact with these domains, we can construct environments that specifically teach these things. Teaching mathematics students who identify with a domain that prohibits them from gaining entry into the domain of maths, about semiotic domains and how to construct the appropriate identities in order to interact with them, makes students aware of their own learning and how it is occurring. This does two things. First, it allows students to critically reflect on their own history and how that affects their ability to interact with their surrounding semiotic domains. Second, it gives students a stake in the lesson; it makes them aware of why they are learning. It is what Dewey (2005) refers to as educative teaching as opposed to mere training (pp.10-11), a distinction I look at in detail in the next chapter.

Video games that players are able to identify with *can* allow the kind of education Gee describes. However, one of the biggest problems with this argument is the assumption that because video games are built on a foundation of sound educative practices that they are somehow automatically going to produce anything of value. What Gee describes is an account of how video games can be read, which is not to say that this is how video games *are* read. While I agree with Gee that the formulation of the real, virtual, and projective identities is present when someone is playing a video game, an awareness of this process is crucial if it is to have educative value. Video games have the potential to be educative. However, I don't think this is explicitly the case. Gee (2007) acknowledges this when he says:

> [M]any people who have read this book take it to be an argument for using games in schools or other educational settings. However, that is not the argument I have tried to make in this book. I have first wanted to argue that good video games build into their very designs good learning principles and that we should use these principles, with or without games, in schools, workplaces, and other learning sites … [T]he argument in this book is not that what people are learning when they are playing video games is always good. Rather, what they are doing when they are playing good video games is often good learning. We can learn evil things as easily as we can learn moral ones. (pp.215-216)

What is learnt when someone plays a video game is how to play the game, and the world of the game. In many cases, this is entirely irrelevant to anything beyond the game, and offers no value of any kind. Gee suggests we can learn evil things just as easily as good, however, what is far more likely is that we will learn useless or irrelevant things; things that are only useful or relevant in the game. It is perfectly reasonable to assume some would play RDR and not reflect on these issues of moral ambiguity. But, there is still learning going on, and according to Gee it is what he calls good learning. This leads to a conclusion that I will address in Chapter 6, namely that video games have been mis-categorised as learning tools. While I agree with Gee that when someone plays a game they are engaging in a useful form of learning, I argue that the root cause of this learning is not found in the game. It is the playful attitude, the attitude that games require of us, that is responsible. In re-categorising video games as texts, which I discuss in Chapter 6, their use, and how they can fit into a classroom, is more easily identified.

So far in this chapter I have described how video games can facilitate our understanding of how to interact with semiotic domains. Now it is time to see how this can be applied to learning generally and education specifically and why we would want to do this.

The How and Why of Learning

The very beginning of RDR is an introductory sequence of the playable character John Marsden getting on a train to the first destination in the game, a small town called Armadillo. I don't start this game (or any other) as myself. I start as a player with a virtual self (in this case, John Marsden). I am never expected to be in this game without the presence of the virtual self. I can't fire a gun, I'm not an expert on a horse, I don't like the heat, and I can't take a shot of whiskey without making a bunch of weird animal noises afterwards. But the virtual self, me as John Marsden, can do all of these things. It is not the actual abilities, but the level of social integration that is important here. Being able to take a shot like a cowboy is not an important skill, but the implied ability adds to the character of John Marsden (my virtual self) as someone who lives in this world. There is still a skill to learn about riding a horse in RDR, but John Marsden already knows how to get on a horse, the basics of horse riding, and how to not look like a fool while doing it; something that currently I cannot do. This combination of me (Liam who is not proficient at those things John Marsden can do) and not me (the skilled John Marsden) allows for a high level of imitation. This imitation, however, is just the beginning. In my attempt to understand this phenomenon I want to talk about two different psychological theories that help to explain why Gee's identity schema is a key to understanding this kind of learning. These theories are Lev Vygotsky's Zone of Proximal Development (ZPD) and Mihaly Csikszentmihalyi's Flow Theory. Gee mentions both of these theorists in his work, but I don't think he gives them enough weight.

According to Vygotsky (1978), “the only 'good learning' is that which is in advance of development” (p.89). He uses the ZPD to describe how children develop their higher psychological functions. Traditional approaches to learning and development tend to evaluate a child's abilities based on prior knowledge and skills. The child was assessed according to what they could accomplish individually. The ZPD measures something more. It is, as Vygotsky says, “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p.86). Vygotsky argued that what children could accomplish on their own were skills they had already developed, whereas skills children could show with assistance or in a group were skills *they were in the process of developing*. The ZPD measures

the distance between these two points. What Gee's theory alludes to is that video games create an environment that allows the player to work within their ZPD. This means games don't test what gamers know, but push them to use what they already know to do things they don't yet know how to do. As Vygotsky says: “human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them” (p.88). Video games create a community whereby members of the community can develop certain skills that would be beyond their level of ability were they working alone. Another characteristic of a good game, then, is the ability to create communities. This community of learners that can develop around a good game is something that will be discussed in the next chapter, as Dewey highlights this specifically as important to the classroom and any environment where learning occurs.

Flow theory is quite different to the ZPD. The ZPD measures the distance between actual skill and potential or developing skill. Flow theory describes the ideal conditions a learner finds themselves in when they are functioning within their ZPD; this is otherwise known as the psychology of optimal experience (Csikszentmihalyi 1975; 1990). Csikszentmihalyi (1990) says that when we voluntarily engage in an activity where the challenges are perfectly matched by our abilities we can act at our peak. A flow state is characterised by intense concentration, a loss of self-doubt in the person's abilities, and euphoria or happiness resulting from the ability to act in this heightened state. According to Csikszentmihalyi, it is the point between boredom and anxiety. If an activity is too challenging, we become anxious; too easy and we become bored. The best moments, he says, “usually occur when a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile. Optimal experience is thus something that we *make* happen” (p.3). A state of flow is achieved when we are engaged in an activity that we value, one that challenges our abilities but does not go too far beyond them. One of the most significant outcomes of a flow state is learning new skills and sharpening older skills. As our skills increase, so too must the challenges. Before long, the activities that induce a flow state for us are significantly more advanced than before. Csikszentmihalyi suggests that almost any activity can bring about a flow state with the right attitude. However, certain activities excel at bringing about flow.

> Such *flow activities* have as their primary function the provision of enjoyable activities. Play, art, pageantry, ritual, and sports are some examples. Because of the way they are constructed, they help participants and spectators achieve an ordered state of mind that is highly enjoyable. (p.72)

Play, games, and video games are instances of flow inducing activities.

In the beginning of RDR there are few enemies around. The first town of Armadillo is fairly peaceful. This gives players the opportunity to familiarise themselves with the controls and the game world. Continued play and the player will master more of the skills in the game, but the challenges will also increase. More bandits appear as new parts of the map are unlocked and more items become available. As we progress, our skills increase. In order to stay in a flow state, our challenges have to increase as well. The side effect of this is we get better at the activity. Another characteristic of a good game, then, is one that has a learning curve that matches this progression. Games that can find this balance construct an environment that helps the player to attain a flow state. Flow theory has other very interesting effects on the player; complexity, loss of self-consciousness, and happiness.

Flow increases the individual's complexity. This is characterised by two psychological processes: differentiation and integration. According to Csikszentmihalyi:

> Differentiation implies a movement toward uniqueness, toward separating oneself from others. Integration refers to its opposite: a union with other people, with ideas and entities beyond the self. A complex self is one that succeeds in combining these opposite tendencies. (p.41)

As we get better and better, we can accomplish more. It is, as Csikszentmihalyi says, that we see ourselves as more capable and more of an individual. We differentiate ourselves from others through unique experiences. However, he points out that flow also "helps to integrate the self because in that state of deep concentration consciousness is unusually well ordered. Thoughts, intentions, feelings, and all the senses are focused on the same goal. Experience is in harmony" (p.41). Integration helps to organise differentiated components on an individual level (differing identities, selves, goals) and a community level (other individuals and communities). This leads to an individual who is both autonomous and situated within a community. The differentiated and integrated self is the result of flow. It is an effect of emerging from a flow state. However, during flow the individual experiences a loss of self-consciousness, or more precisely, a loss of consciousness of the self. According to Csikszentmihalyi (1990):

> a loss of self-consciousness does not involve a loss of self, and certainly not a loss of consciousness, but rather, only a loss of consciousness *of* the self … When not preoccupied with our selves, we actually have a chance to expand the

> concept of who we are. Loss of self-consciousness can lead to self-transcendence, to a feeling that the boundaries of our being have been pushed forward. (p.64)

A loss of self-consciousness is a temporary loss of the ego. It is a loss of both our bravado and our doubt. We are always situated, always acting within some context or other. A loss of self-consciousness changes where we act from to somewhere that is not us, but still us. This loss is a shifting of focus from our real-world selves to our virtual selves. It allows us to act without knowledge of our limitations (both self imposed and actual). For the hour or minute or second or instant that we are in flow, we do not see through ourselves, but through someone else, another self. To borrow Gee's terms, the loss of self-consciousness marks the temporary dominance of the virtual self over the real-world self. This loss, to which Gee refers, can, as Csikszentmihalyi points out, lead to something extraordinary.

> There is one very important and at first paradoxical relationship between losing the sense of self in a flow experience, and having it emerge stronger afterwards. It almost seems that occasionally giving up the self-consciousness is necessary for building a strong self-concept … In flow a person is challenged to do her best, and must constantly improve her skills. At the time, she doesn't have the opportunity to reflect on what this means in terms of the self – if she did allow herself to become self-conscious, the experience could not have been very deep. But afterwards, when the activity is over and self-consciousness has a chance to resume, the self that the person reflects upon is not the same self that existed before the flow experience: it is now enriched by new skills and fresh achievements. (pp.65-66)

By itself a flow state is a pleasant experience. If we don't consider it further, nothing further will come from it. However, if we reflect back on our experiences the flow state becomes something transformative. If the loss of self-consciousness is the temporary dominance of the virtual over the real-world self, then the act of critical reflection on our past actions while in a flow experience is our projective identity in action. By looking back at what we did while in a state of flow, we inject our *selves* back into the action. This is the self that is both differentiated and integrate. It is the individual self *in* the community. This conception of the self is important to both Dewey, as discussed in the next chapter, and to our conception of autonomy, as discussed in Chapter 5. As I have stated above, the projective identity helps keep the real-world self and virtual self

synchronised. When we come out of our flow state we can, in a Vygotskian sense, evaluate the actions of our virtual selves and either accept the new skills, abilities, beliefs, or practices as also a part of our real-world selves or reject them. I contend that it is this moment where learning occurs.

Finally, flow theory is often characterised as a path to happiness. When people are engaged in this way, they experience euphoria, peace, and accomplishment. What Csikszentmihalyi's research shows is that this process is extremely pleasurable. If we accept the connection between Csikszentmihalyi's work and Gee's own research, we come to the conclusion that the act of successfully learning new things is a pleasurable experience. We are happy when we learn in this way. It sounds cliché, but we love to learn.

An Observance of Hermits, a Shrewdness of Apes, and a Table of Gamers

Playing video games and going to school are seen as single-player activities. Even when in groups (classrooms or online play) the tendency is to see a group of individuals competing with each other. We still see individuals acting individualistically, but interacting with other individuals. In the liberal sense of the individual such interactions are seen as transactions between individuals, where community is the aggregate of all individuals. This is a common assumption about how people function. After all, we are individuals separated both physically and mentally, right?

The assumption that we are entirely separate from everyone else is something I would like to challenge. Not only are we inherently social animals, but much of ourselves can be found beyond our apparent individual self. Take this chapter for example. It may seem to you that I am talking directly to you, conveying information from my atomistic brain to your atomistic brain. But, in looking closer you will see that this communication is only possible via the semiotic domain of the written language that we both share. Closer still and you will see various idioms and phrases that really only have meaning in this culture and at this time. As academics we see this all the time when reading books from very different historical contexts to our own. Often we have to translate, not just the language, but also the social understanding of phrases and sayings. You may have also noted the quotes I am using and the theories I am unpacking. These things are not from me, but from someone else. What appears at first to be a solely individual work turns out to be a signpost; a reference point in our collective knowledge signalling where I am at this present time, intellectually speaking. Who I am as an individual and what I am capable of producing into the world, is a unique collection of adherences to semiotic domains. These domains can be thought of as bubbles of situated knowledge, or a collection of beliefs, values, and habits that have meaning within their domain. As

a member of many domains, I have many different *selves* which makes up my identity. Each self is situated within a domain of which I am a member. My identity, the person who I am, is the combination of all of my selves from the various domains to which I belong. If this is accurate, education comprises the creation and integration of bubbles (domains) of knowledge. Education in this sense is necessarily social.

According to Gee, video games help to integrate gamers into the semiotic domain of a game by the creation and integration of selves. This is the first part of the story about games and learning. The second part is the gaming community that is formed. The gaming community, or the members of the semiotic domain of a particular game, are an important part of an effective learning environment. We can even make this another trait of a good game; good games are ones that form a strong learning community in which they are embedded. However, these are communities of individuals. They are communities that Matthew Lipman, who build Charles Peirce's (1868, 1877, 1899) notion of inquiry, John Dewey's (2005) educational theory, would refer to as communities of inquiry (Lipman & Sharp 1978; Lipman, Sharp & Oscanyan 1980; Lipman 2003, 2004). The idea of communities that are not in opposition to individualism is further discussed in Chapter 3.

It is important to start with a single-player game. This is because the most significant point about a gaming community is the game itself. In order to see how gaming communities can exist at all, we first have to understand how a gaming community can exist around a single-player game. We must understand that the game is part of the community's habitat. Habilitation is a Deweyan term that I discuss in Chapter 3. Briefly, our habitat consists of the environment where we act. It encompasses the physical and social sides of our communities. Our habitat, for Dewey, has an effect on our habits, or way of being and doing. This is a reciprocal nature, where our habits affect our habitat and vice versa. Given this, a game acts as a part of the habitat for the community of gamers, and it is where our habitats and habits interact. It is the place where all action happens. While my physical copy of *Skyrim* is different from my friends, in a sense we are both acting in the same *Skyrim*. We visit the same towns, we talk to the same townsfolk, we take on the same main quests and we share many similar side quests. The important part of this is that my experiences are relatable to my friends because we are acting in the same scenario; the same thought experiment. *Skyrim* is a sandbox game. This means that the game world is open and gamers can travel in any direction they choose. Certain story lines will direct the player in specific directions, but the player does not need to follow that path. As a result, my time in *Skyrim* will be different from others who play. But we are both still playing in the same sandbox. Being able to share experiences with others entails generalising our experiences enough so that others can understand them while still keeping them

complex enough so that they convey something significant. When members of the same community do this, their experiences do not need to be simplified as much. As such, members of the same communities can communicate in much more complex ways than 'outsiders'. This is one of the core ideas that Dewey talks about in his book *Democracy and Education.* I will explore this in the next chapter in detail, but I will briefly raise it here in relation to playing games to conclude this chapter. Dewey explores the function of sharing experiences in learning and the roles of 'teacher' and 'student'. According to Dewey, we can only convey and change information within a specific community if we are members of that community. In Gee's terms, membership with a semiotic domain is necessary in order to, not just understand, but also to communicate and alter the knowledge within that domain.

Gaming communities that follow this method of sharing knowledge are common. Games like Skyrim inspires a myriad of groups, both online and in the world, of people sharing information, discussing the game, the mechanics, the lore; every aspect of the game. Those who have played the game extensively take on a teacher-type role within the community, not just sharing information with others but actively producing information. Once we become members of a semiotic domain, we can be both students and teachers within that domain.

Chapter 3

Immaturity, Dependency, and Doubt: A philosophy of Play-based Learning

When we play a video game, we employ a certain attitude, within a certain context, embodying a certain identity. We do this to bring about a state of affairs *just so* a certain experience or set of experiences can occur. The specific game doesn't matter as much as the act of playing. It is the same in any good learning environment. There are a variety of things that can be learnt, and an effective learning environment will be able to cater to this. It is not what is taught, but the act of learning, that is important. The specific content taught to a classroom will be important to individual students, parents, the community, and society in varying degrees, but it is the *act of engaging* in a learning activity that is important to this chapter.

Engagement cannot be intentionally faked, although individuals could disagree over levels of engagement and observers could be mistaken that engagement has occurred. To be engaged in a subject, or an area of knowledge, is to take part in the world of that subject, to have a stake in it, *to be in it,* in a sense. Unengaged learners can memorise information, but they cannot necessarily do anything with this. This is not to say that those who are unengaged will fail a given class, but they might not learn anything that has any use, purpose, function, or effect on their lives. We have become very efficient at *training* people. We are trained for school, for work, for social interaction, and we can certainly train students to pass their assessment without engaging them in effective learning activities. It is beaten into us, not by fists (not anymore) but by unrelenting and untiring repetition. Historically, what Paulo Freire (1972) refers to as the “banking concept of education,” in which students are “receptacles” to be “filled” with the “content of the teachers narration,” has been valued at the expense of most other forms of learning, e.g. student-centred learning and problem-based learning.

> Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits which the students patiently receive, memorize, and repeat. This is the 'banking' concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits. (p.58)

The de-valuing of these other models of education is still, to some extent, practiced today. In doing this, we disregard other forms of intelligence such as critical reasoning and creative thinking. Picasso, Einstein, Socrates, and Tesla are not remembered because they were very good at memorising and recalling information. None of these people were ever champions on Sale of the Century. We remember them, we study them, and we learn from them because they were able to use the knowledge everyone else had at the time and create something new from it; that is, they were able to reconstruct knowledge which has an impact on the history of ideas. If schools should do anything at all it should be to *educate* in this sense*,* not train. John Dewey (2005) makes a clear distinction between mere training and educative teaching in his book *Democracy and Education*.

In this chapter, I will explore the ways in which video games achieve this, and how we can apply these ideas to our educative institutions and to our idea of learning generally. In the previous chapter, I discussed Gee's (2007) theory on education and video games, the central claim being that video games are very effective at engaging gamers and teaching them about the game and how to play. The principles that embody this engagement and these learning techniques, according to Gee, are powerful tools that deserve our attention. We can learn a great deal from video games, and other forms of play, that is directly applicable to primary, secondary, and tertiary education. Hence, in this chapter I will further strengthen Gee's arguments by showing how the learning in video games directly relates to Dewey's notion of education.

Communication, Education, and Community

According to Dewey (2005), "education consists primarily in transmission through communication. Communication is a process of sharing experience till it becomes a common possession" (p.9). One of the central claims Dewey makes is that education is a social, rather than an individual pursuit. A genuine society "not only continues to exist *by* transmission, *by* communication, but it may fairly be said to exist *in* transmission, *in* communication" (p.5). Communication is not just verbal or visual, but rather, in all forms of communication there is a mutual sharing of ideas and ideals with others. Communication is, therefore, a way of life; a way of living with others. The kind of associated form of learning Dewey refers to occurs in communities; in the continual *act* of ongoing and mutual communication with other people. It is the sharing of meaningful experiences and desired ends in communion with others and sharing in ends that are not our own but a social reconstruction born from collaborative thinking. However, these experiences have to be:

> formulated in order to be communicated. To formulate requires getting outside of it, seeing it as another would see it, considering what points of contact it has with the life of another so that it may be got into such form that he can appreciate its meaning. (p.6)

My experiences have been shaped in a unique way. In order to share these experiences, I have to translate them into something others will understand. This is one of the most primary functions of language. In language we have constructed a common ground where communication is possible. In order to be able to communicate my experiences I first have to convert them into language, either spoken, written, or into another form of communication. Those who study language or communication will know the difficulty in this. In conveying my experiences, I need to be able to translate my direct experience into something intelligible. Formal languages are generally used for this, but there are other methods that we use. Music, for example, has a way of expressing emotion that the written or spoken word cannot, by allowing the recipient of the communication to *feel* said emotion, not just be told about it. Whether this emotion is directly from the music itself or if emotion is simply a response to said stimulus highlights part of the ambiguity in communication. What I communicate may not be exactly what is received. Given this, the need for common ground to communicate becomes apparent.

To understand the problems faced by the society in which we live is to understand the experiences of our fellow citizens. To be a member of a society is to understand, and contribute to, the experiences of those who live in that society. For Dewey, communication is not only social, it is also educative: “Not only is social life identical with communication, but all communication (and hence all genuine social life) is educative. To be a recipient of a communication is to have an enlarged and changed experience” (p.6).

Education for Dewey is the transmission of experience; what he calls communication. This is not the same as the transmission of knowledge in the banking conception of education Freire criticised. In order to understand someone's communication or in order for them to understand you, there must be some common ground. According to Dewey, “[o]ne has to assimilate, imaginatively, something of another's experiences in order to tell him intelligently of ones own experience” (p.6). This common ground is both a necessary feature and a result of Dewey's genuine social life, that is, education through communication. Put another way, in order to communicate our experiences with others, we need to explain them in a way others will understand. Language functions within this common ground. However, language doesn't exist in a vacuum. Communication, sharing our

experiences with others, can only occur *within* a community. The community provides context to the common ground in their shared habits and practices, ideas and ideals, knowledge and beliefs. What is most important about Dewey's system is not the specific habits and practices that are taught, but that what is taught is the process of communication; the sharing of experiences with others in our community. The foundation of Dewey's education is teaching people how to communicate, and, therefore, both teach and learn; how we transmit, construct, and receive all our knowledge. Communication needs to be taught to each generation as they enter the community; without explicit teaching of our ways (ideal or otherwise), these ways will be lost.

Like Dewey, Gee (2007) sees learning as social: "Like reading and thinking, learning is not general, but specific; like reading and thinking, it is not just an individual act but a social one" (p.7). On reading and thinking, he says "[l]iteracy and thinking – two things that, at first sight, seem to be 'mental' achievements – are in reality also primarily social or cultural achievements" (p.5). In the previous chapter, I discussed Gee's understanding of reading and writing. The literate, according to Gee, are able to 'read' and 'write', or communicate, with others when they understand the context of the information. We cannot be reading or writing in general, we always do so in some context. How we read John Steinbeck's *Of Mice and Men* is generally different to how we read the latest Wolverine comic *The Death of Wolverine*. However, there are communities who would read *The Death of Wolverine* as a literary text, in much the same way as students of critical literature would read *Of Mice and Men*.

Like reading and writing, thinking also functions in this way according to Gee. We tend to think of our thoughts as our own; that they are individual thoughts. However, our mental processes are just as context sensitive as any other form of communication, because they rely on the same principles as reading and writing; they are social. As Vygotsky (1980) says, "[t]he use of signs leads humans to a specific structure of behaviour that breaks away from biological development and creates new forms of a culturally-based psychological process" (p.40). Just as with reading and writing, we do not think generally. We only think about some*thing* and in some context. Therefore, thinking for Gee is a *social act*. Dewey (2005) also acknowledged this point: "Thinking and feeling that have to do with action in association with others is as much a social mode of behaviour as is the most overt cooperative or hostile act" (p10). How we read and how we think is affected by the social groups and communities we are connected to.

Semiotic Domains, Communities, and Bubbles

Once again we turn to Huizinga (2014), who thought of play as a pre-cultural element of our social structure. Play creates space where a distinct kind of action can occur. It has rules and order, and contains context sensitive information that is only useful within the space.

> Play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is 'different' from 'ordinary life'. (p.28)

It is a bubble of activity and knowledge. What is distinct about these bubbles of play is their relation to both Gee's and Dewey's idea of social groups, specifically how they frame and filter the world. In Gee's (2007) words:

> So, then, what determines how you read or think about some particular thing? What determines this is your experiences with other people who are members of various sorts of social and cultural groups, whether these are biblical scholars, radical lawyers, peace activists, family members, fellow ethnic group or church members, or whatever. These groups work, through their various social practices, to encourage people to read and think in certain ways, and not others, about certain sorts of texts and things. (p.6)

As mentioned in the previous chapter, Gee refers to these social groups as semiotic domains; "an area or set of activities where people think, act, and value in certain ways" (p.19). This is congruent with Dewey (2005) who describes society as being made up of communities of connected beings.

> A being connected with other beings cannot perform his own activities without taking the activities of others into account. For they are the indispensable conditions of the realisation of his tendencies. When he moves he stirs them and reciprocally. (p.10)

This Deweyan framework gives us a greater understanding of what Gee means; semiotic domains connect members of the domain in this way. It is simply not the case that people with vastly different interests and goals come together and freely share their ends harmoniously and without

incident. Most of human history is made up of one group conflicting with another group over something. What actually happens is that people with similar interests tend to group together. Perhaps you have a particular interest in the identity of our saviour and one true god. Or maybe you have very staunch beliefs about which football team is amazing and deserves to win, and which teams should not because they are defective in some way. We group together accordingly in our communities. This is not to say that we only interact with those who are in our immediate semiotic domain, nor is it to say we are defined by one, seemingly trivial social group. To quote Dewey:

> What they must have in common in order to form a community or society are aims, beliefs, aspirations, knowledge – a common understanding – like-mindedness as the sociologists say … Persons do not become a society by living in physical proximity, any more than a man ceases to be socially influenced by being many feet or miles removed from others. A book or letter may institute a more intimate association between human beings separated thousands of miles from each other than exists between dwellers under the same roof. (p.6)

Societies are entirely made up of these semiotic domains; "human cultural and historical creations that are designed to engage and manipulate people in certain ways," and which "attempt through their content and social practices to recruit people to think, act, interact, value, and feel in certain specific ways" (Gee 2007, p.36). *Any* connection we have with others identifies some semiotic domain of which we are both a part. As Dewey (2005) says:

> A modern society is many societies more or less loosely connected … Each such group exercises a formative influence on the active dispositions of its members. A clique, a club, a gang, a Fagin's household of thieves, the prisoners in a jail, provide educative environments for those who enter into their collective or conjoint activities, as truly as a church, a labor union, a business partnership, or a political party. (p.15)

Large connections such as political affiliation, religion, and career, are just as important as seemingly small connections like shared hobbies, favourite media (music, movies, TV, radio, magazines etc.), and sports teams. This is because these are our lines of communication within and between groups. We are all a part of many semiotic domains; a network of domains that makes up our personal social landscape, comprising endorsements of our ideas, ideals, and beliefs. Membership in any one semiotic domain means aligning or endorsing certain ways of being. A

scientist, for example, values the scientific method and has a firm belief that science is important. This is a fairly broad semiotic domain. A biologist would certainly fit into this domain, but she would also fit into a more specific domain, that of biologists. This domain might hold certain ideals about a particular part of science (e.g., biology). This may be as superficial as different modes of practice or as complex as different cosmologies. So, while the biologist would have more in common with other biologists, she certainly still has a lot in common with other scientists. Narrow, more specific semiotic domains allow us to align with others who share very similar ends. Broader domains, on the other hand, allow us to see the similarities between our ends and the ends of others who are seemingly very different from ourselves. So, in another way, members of rival football clubs may oppose each other in the stadium, but they both share the same love of the game, and can express as much in other contexts; at home or at work.

Following Dewey's line of reasoning, as mentioned earlier, genuine social life consists in the transmission of experience through communication; what he calls education. I claim that this can only occur within a semiotic domain. Whereas Dewey talks about communities, Gee talks about semiotic domains. We are taught information that has been abstracted from experience to a point where we can properly understand it. However, when experiences are abstracted beyond the connection to their semiotic domain, they lose the meaning they are trying to convey. As both Gee and Dewey have said, raw information is useless in this abstracted form. Our experiences still need a connection to their domain to be understood. In other words, we need to situate our experiences in the relevant semiotic domain in order to share them with others in our community. A baker's dozen, for example, is simply not correct in the domain of mathematics. Within a social domain where small businesses are valued, the baker's dozen not only makes sense, it is a sign of a strong community. Education is (or at least should be) about constructing semiotic domains where Deweyan communication can occur. Narrower semiotic domains are capable of sharing more complex information between members of that domain, but broader domains are capable of communicating between larger ranges of members in the greater community.

Any educational institution worth their salt would recognise the need for both narrow and broad domains. This is because in the process of generalising experience in order to communicate we necessarily lose information. We cannot fully communicate a whole and complete idea to someone who is not in our exact position (Dewey 2005; Gee 2007). This is because we are governed by the many semiotic domains to which we are members. These networks are like fingerprints, no two are going to be exactly the same. This is because each individual has different experiences in life. However, the result is that when we want to communicate part of our experience, at least some

generalisation needs to occur. Narrow domains help students to specialise, not just intellectually but in terms of their identities. Broad domains, on the other hand, keep our newly specialised students connected to their larger community. It is the network of domains that we each create that is important to the individual. This is because some domains will be able to communicate with more people, while others will be able to communicate more detailed information.

If I were to talk about my time in Skyrim as a Wood Elf, you would need to know that these experiences all occurred in the game The Elder Scrolls V: Skyrim. The information that I am the Dragon-born even though I am not a native Nord would mean nothing to you without the kind of knowledge you could only have if you were a part of the semiotic domain of 'people who play The Elder Scrolls games'. I can abstract my experiences as a Wood Elf to the point where you understand what I did, but the further I have to abstract my experience, the less meaning I can convey. Semiotic domains give context to information; they are bubbles of situated knowledge.

Habit(at)

So far, I have discussed the necessary environment for this kind of education. Dewey calls this our *Habitat*. One of the first things that Dewey wants to acknowledge is the overt level of control in the school environment, and in all environments. His idea of education is all about creating an environment that facilitates a certain kind of learning. It is directive and it is a form of control. Like in a good game (defined by the conditions outlined in the previous chapter), the environment has to be constructed in great detail to allow for certain activities and experiences. Dewey (2005) acknowledges this, but only in so far as *any* environment is directive. Every stimulus, he says, directs activity, and “it does not simply excite or stir up, but directs it toward an object” (p.17). With an environment like the classroom, if we don't construct it, it will be constructed by other influences. Schools, for Dewey, are places of communal indoctrination, in a sense. The young do not simply become members of our community by virtue of birth, but because we *lead* them through. This leading is not direct; as Dewey points out:

> The required beliefs cannot be hammered in; the needed attitudes cannot be plastered on. But the particular medium in which an individual exists leads him to see and feel one thing rather than another; it leads him to have certain plans in order that he may act successfully with others; it strengthens some beliefs and weakens others as a condition of winning the approval of others. (p.9)

This shows a great benefit, and a great risk, to the educational system. The classroom has the ability, when properly constructed, to present *a* truth as *the* truth; constructed environments can initiate members into a domain of knowledge that restricts entry into other domains. Given this, Dewey is keenly invested in constructing an environment that allows for diversity in communities. He says

> it is the office of the school environment to balance the various elements in the social environment, and to see that each individual gets an opportunity to escape from the limitations of the social group in which he was born, and to come into living contact with a broader environment. (p.14)

Dewey considers the habitat, or environment, to be a way to achieve this. “The only way in which adults consciously control the kind of education which the immature get is by controlling the environment in which they act, and hence think and feel” (p.14). In his paper, 'The Hands and Feet of the Child', Eric Anthamatten (2012) draws out Dewey's ideas on this topic. He says,

> education is habilitation, the process of making one 'able' to make these connections that facilitate growth, of cultivating ethical 'habits', of helping the student to come to have 'hold of' her world as well as to recognise the ways in which the world has 'a hold' on her, to facilitate the lifelong journey of constructing and maintaining a habitat, a home, a healthy abode. (p.32)

Our habitat or environment facilitates our growth. It helps to construct us. The environment we live in will dictate our cultural background, knowledge, value systems; the very foundations of whom we are. If you were to grow up on a ship and had never seen land, you may expect all buildings to resemble your ship. What a shock you would have when you realised that cement and bricks made up most structures. How difficult would it be to fathom solid ground if all you had known is the sea? If we had only ever lived in a community of one race, or one creed, or one set of values, would we be capable of seeing the value in any other way of being?

Just as our habitat has 'a hold of' us, so too do we have a hold of our habitat. Anthamatten says: “habitats 'have a hold of' habits. As individuals and a species, we only adapt insofar as we develop habits that appropriately respond to our habitat” (p.32). While our habitat creates our habits, our habits can reshape our habitat.

> Habits, then, are an effort to 'have a hold of' the habitat. Twigs become nests, trees become huts, the hidden secrets of rocks become jewels or fuel, floods become irrigation, illness become motivations to medicine, customs and laws become society, politics, art. (p.33)

Just as we are created by our environment, so too do we create our environment. Anthamatten argues it is through our hands and feet that this reciprocal creation happens. Our hands and feet are what grasp the world, and are in turn grasped by the world. Individuals struggle to take control of their environment, or of their community, through habitual action, while at the same time their habits are being shaped by the environment, the community, their habitat. The focus on the hands and feet highlight, for Anathamatten, the necessity in seeing our environment as not just social but physical. In the next chapter I explore the idea that, like the hands and feet, the mind is also prehensile and capable of *grasping* the world. What implications this has for learning and our understanding of cognition will also be discussed.

The idea of grasping and being grasped by the world mirrors an idea from Martin Heidegger (1954); the setting upon which sets upon humans, in the order of revealing. Heidegger's failure however, is that he saw this as an inescapable prison where the idea of standing reserve makes people and the world 'mere currency'. The idea that Dewey and Anthamatten are drawing out here is much more optimistic. In the face of almost certain determinism from our habitat, it is of ultimate importance to see that our habits change our habitat, thus creating a cycle of change where neither habit nor habitat precede or dominate the other, but function only in reciprocation. Our habitat is not mere determinism. The other side of this is that habit is not merely an exertion of pure will. Jennifer Bleazby (2011) accurately positions Dewey's insights between absolutism and relativism. We are not purely determined by our habitat, but neither are we purely controlled by our free will as manifest in our habits. This is not a causal relationship, but one of reciprocation. This particular reciprocation has further implications regarding our autonomy, and the creation of our selves, which I explore in Chapter 6.

Pragmatism and Behaviourism

The classroom, historically and currently, can be described as a variously controlled environment; at one extreme, progressive student centred education, and at the other, the banking conception of education. But any environment can be constructed to be coercive. We are created by the world around us, even as we create the world. The classroom is a microcosm, a miniature version of what

Dewey called the greater community; not necessarily in its structures or institutions, but formed by the kinds of beliefs, attitudes, behaviours and actions children bring to the classroom, which informed by social and political institutions, such as the family, religion, culture, law. It is, much like a good game, created for a particular activity in which it can take place. To reiterate (from our discussion in the previous chapter), a good game can be defined by the following characteristics:

1. The game can successfully convince players to take on the necessary attitude for game-play to occur.
2. The game activity is forceful in that good games convince the player to take on a certain attitude (and thus, play the game).
3. The game embodies the principles of learning well.
4. The game require that players continue to identify with their playable character (as a virtual self) so that they continue to play the game to the end, as forging strong connections between the real-world and virtual identities allows for future action.
5. The game has the ability to create communities.
6. The game has a learning curve that matches this progression.
7. The game has the potential to form a strong learning community in which they embedded.

Within these walls, great and interesting and not so great and interesting things occur. The classroom, like a game, creates and feeds its own system of values, which are not always accepted by all members of the greater community, and, indeed, can divide communities. Recent Australian examples include the controversial Primary Ethics program in New South Wales (citation: Author, date) and LGBT-inclusive education (citation: Author, date). It creates and feeds its own system of values, with through the hidden curriculum or explicitly, by plugging into a semiotic domain, in the form of a curriculum subject or learning area, such as Mathematics, Science, Languages, History, as well as cross curricular priorities or capabilities, such as literacy, numeracy, critical thinking, ethical behaviour, information and communications technology. When the class ends, so too does the world within those walls. However, one of the aims of the teacher is to provide opportunities for children to bring what they learned in the classroom to the greater community, either in the form of the transmission of knowledge and values or through transformation in which students' learning experiences impact on the community. This is no easy task, all games must end, even good ones (Huizinga 2014). The challenge for the teacher is to develop teaching and learning strategies that enable the transfer of learning experiences from the classroom to the greater community; that the

actions of the student within the learning area domains have an effect on the other domains, on their world and the worlds of others.

In the case of using games as a pedagogical device, The aim of the teacher is to make connections between learning activities experienced as virtual selves and real-world selves, and create opportunities for effective change between the habits and habitat of both. In other words, the learning experiences derived from the temporary worlds of games and related classroom activities need to be more than classroom experiences; to be effective, these experiences need some transformative affect on students so that their new habits can be tested in the greater communities where they live. A good game will become a part of you. A good game forges the right kind of attitudes in the right kind of ways that allow, that make, our identities permanently take on a part of that semiotic domain. The right habitat creates habits that forge new learning activities and spaces; that develop autonomy in learning. The right habitats help to create habits that continue to change the habitats again. I am a philosopher, just as I am a Hylian, a husband, a Jedi, a father, an assassin, a cowboy, a killer, and a saviour; it is the blending of real and not real, of temporary and permanent selves, that make up my identity. The aim of the teacher is to show the plasticity of the domain, and of students.

The teacher's role is that of facilitator, but without being *in* the learning activity and attitude, they cannot facilitate anything meaningful. Mere facilitation is not enough; the teacher needs to also place themselves in the position of the student, as a co-inquirer. The teacher has to act, and has to care about the action; they need to be invested. There is an acknowledgment here that the teacher is still a student, or at least is capable of being one still, that I think has weight. This is taken up in more detail in chapter 7 where I discuss the community of inquiry. In a similar way, the student also needs to be *in* the learning activity and attitude. For the student this amounts to having a genuine or vested interest in the thing being taught. To be genuinely interested, the student needs to be a part of the semiotic domain. And membership in a given semiotic domain, says Gee, means acting as a part of that community. This necessarily entails teaching others in the domain. The more experienced members teach the less experienced. It is how any given domain passes down its history, its heritage, its values, and its beliefs. So teachers (as facilitators), in semiotic domains, are also students (co-inquirers) who have been a part of the domain for enough time to facilitate knowledge in the classroom. This process gives the teacher legitimacy and the student a goal.

Students, and by extension teachers as co-inquirers, need to see the importance of the semiotic domain in which they are engaging. Dewey (2005) argued that there is a difference between mere training and real education.

> In many cases – too many cases – the activity of the immature human being is simply played upon to secure habits which are useful. He is trained like an animal rather than educated like a human being. His instincts remain attached to their original objects of pain or pleasure. But to get happiness or avoid the pain of failure he has to act in a way agreeable to others. In other cases, he really shares or participates in the common activity. In this case the original impulse is modified. He not merely acts in a way agreeing with the actions of others, but in so acting, the same ideas and emotions are aroused in him that animate others. (p.11)

To be trained like an animal is to find the interest or purpose of an activity outside of the person doing it. Educational training, which appeals to the banking concept model mentioned earlier, coerces students to accumulate information, not for the usefulness of the information, but for adherence to a bizarre system of reward and punishment. An example of this is a maths exam. The student is encouraged to perform well on a maths exam, not for use of the skills acquired, but for a grade. What all these training models have in common is that they build our rote recall, our memory, and our instincts. As Friere (1972) says: “The student records, memorises, and repeats these phrases without perceiving what four times four really means, or realising the true significance of 'capital' in the affirmation 'the capital of Para is Belem', that is, what Belem means for Para and what Para means for Brazil” (pp. 57-58). We learn to react to certain stimuli; for example, to answer 2 + 2 = 4 is instinctual, not a matter of process. While this is a method of knowledge that values efficiency, and is politically and educationally expedient, it loses something of the equation. Specifically, it loses the math. If 4 is instinctually the result of 2 + 2, there is no mathematical learning at work, just memory. Students are not *doing* mathematics, and moreover, they are not doing mathematics together in a community of inquiry (developing their network of semiotic domains). You can teach a horse or a dog to react to stimuli.

Education, according to Dewey, involves getting the student *engaged* with the material being learnt; it is a form of cooperative intelligence. Students need to not just have an interest in the outcome of the activities in the classroom, but more importantly they need to have a sense of wonder in order to problematise taken-for-granted knowledge. I this sense, they need to develop an attitude that

willingly engages with the semiotic domain of the subject. I need to acknowledge an aspect of this theory that many will see as problematic, but I do not. Under this method, not everyone will, or can, achieve the same results. Each students' success will look different. Simply put, not everyone will perform the same task in the same way, and therefore, assessment, especially summative assessment, cannot be universally applied.

The Adult and the Student

Our current educational institutions (primary, secondary, and tertiary institutes) promote several characteristics to which it is believed all students should aspire. Our educational institutes strive to turn students into adults. Their goal is to "equip[ping] young Australians to live and work successfully in the twenty-first century" (Australian Curriculum General Capabilities 2015). The General Capabilities section of the Australian Curriculum website list 7 key capabilities that students are taught to develop throughout the course of their schooling. The goal is to turn students into adults capable of functioning in our society; children and adolescents are seen as 'future citizens' and not yet 'fully-fledged adults'. These capabilities are: Literacy, Numeracy, Information and Communication Technology (ICT), Critical and Creative Thinking, Personal and social Capability, Ethical Understanding, and Intercultural Understanding. Many of these capabilities are taught directly, as in the case of literacy and numeracy. However, others are more broadly integrated into the curriculum as general traits to be encouraged and nurtured. There will always be contention over what content is necessary to teach all students; about what constitutes the basic elements of information-based knowledge. However, I am more concerned with the characteristics, traits, or dispositions that our schools are promoting. I contend that the traits that are being valued as that which constitutes an adult in Australia in the 21st century can be broadly characterised as: Maturity, Independence, and Certainty. These traits are not explicitly taught, but they are highly valued in schools. Acting in this way allows students to succeed in the particular way the education system wants them to succeed.

The image of the adult that has been constructed is a useful ideal. It depicts someone who is able to function independently and add something of significance to the greater community. However, it is not, or should not be, our only consideration when teaching. We are beings that never stop learning, so schools ought to not strive to construct a completed individual. The completed individual has finished their learning, as indicated by the designation 'adult', as opposed to the designation 'student'. Anyone who is 'still learning' must not be complete. If this is so, as Dewey alerted us to, then schools ought to aim at equipping students with the tools necessary to pursue a life of learning.

Under this framework, the completed individual is no longer the goal, just the opposite. We want incomplete students who never stop learning - students who never cease to wonder. Otherwise, as Lipman, Sharp and Oscanyan (1980) caution, children will become passive adults.

> Many adults have ceased to wonder, because they feel that there is no time for wondering, or because they have come to the conclusion that it is simply unprofitable and unproductive to engage in reflection about things that cannot be changed anyhow. Many adults have never had the experience of engaging in wondering and reflecting that somehow made a difference in their lives. The result is that such adults, having ceased to question and to reach for the meanings of their experience, eventually become examples of passive acceptance that children take to be models for their own conduct." (p.31)

The idea of the incomplete individual as a desirable mode of existence is something that is not fully captured by our initial traits of independence, maturity, and certainty. Therefore, we also need to introduce three opposing traits that, I argue, are just as important. These are: Immaturity, Dependence, and Doubt.

Maturity and Immaturity

It is not uncommon to think of kids as immature, and adults as mature. Consequently, it is not uncommon to think of maturity as a fixed state, and, therefore, immaturity as a state that is not yet fixed, one in flux. Maturity denotes a person who is complete, and, therefore, unable to change; the child is dead and the adult emerges. Dewey (2005) says:

> Our tendency to take immaturity as mere lack, and growth as something which fills up the gap between the immature and the mature is due to regarding childhood comparatively, instead of intrinsically. We treat it simply as a privation because we are measuring it by adulthood as a fixed standard. (p.27)

Dewey defines immaturity as the ability to develop; “When we say immaturity means the possibility of growth, we are not referring to absence of powers which may exist at a later time; we express a force positively present – the *ability* to develop” (p.27). Much like learning, we do not stop developing once we are beyond our adolescence. Immaturity is the mark of someone who is not yet finished changing; one who is alive.

The image of the individual between maturity and immaturity is part of Dewey's recurring theme around dualisms. Like independence and dependence, certainty and doubt, habit and habitat, Dewey positions the person between the two.

Independence and Dependence

It seems somewhat reasonable to want students to be independent, especially in liberal democracies, such as Australia, which value individualism and freedom of choice. After all, as the liberal doctrine portrays, independent individuals contribute to the aggregate good of the community, from which all individuals, in turn, benefit. Individual students are assigned independent tasks. They are graded individually based on their output. They are being prepared to be able adults, to take care of themselves, to work towards the goals they desire, and, generally, to not rely on the community, and subsequently impinge on the freedom of the individuals as each is an aggregate part of that community. Students are taught that their work is their own, that their achievements are theirs alone. They are taught that individual excellence in order to achieve success is desirable. Also, inexplicably, they are expected to be able to work cooperatively with others, but communities are seen merely as aggregate individuals for achieving results that otherwise cannot be achieved alone, rather than as fully-fledged communities in the communitarian sense. Communtarians argue that community is ontologically prior to the individual and "with a view of the citizen as an active and engaged member of society" (Delanty 2003, p.597). Dewey reconfigured this individual/communitarian dualism, and argued that individuals develop from communities. (Dewey 2005; Bleazby 2013). This argument challenges the image of the atomistic individual, who needs to resist the influences of the society in order to stay an individual and autonomous agent (Christman 1989). Dewey's conception of habilitation develops an idea of the individual who *requires* a community to emerge from, and in turn communities that require individuals to create and populate them.

In teaching independence, we also promote competitiveness; an adversarial rather than deliberative approach to relations between individuals, which is a hallmark of liberal democracy. If success is an individual pursuit, then we have to compete with others to succeed. The practice of liberal democracy, especially in an ever-increasing neo-liberal climate of politics, touts competition as good for everyone; it motivates us all to be better than we are. We are led to believe that everyone is capable of success, and by implication, that the lack of success can be found also in the individual.

However, competition denotes that only one or some can win, while the others must not win. Given this, it seems built into the idea of independence that only some individuals will be able to succeed.

Games, particularly video games, are often seen as highly competitive activities that pit one player against another, or against a machine. Some games are built entirely around competition; racing, sports, fighting, and many online games are seen in purely competitive ways. However, for many gamers playing and winning are two very separate things. Playing to win may even be considered not play, by Bernard Suits' (1978) definition. Suits would say the idea of competition and winning something can be separated; that the goal of competing is different to the goal of winning. This can explain why games that have players compete against each other and collaborative games that focus on players acting together instead of acting in opposition are popular. Because when we play, we compete to compete.

Dependence, on the other hand, is often seen negatively, especially by proponents of rugged individualism (e.g. libertarians or liberals who appeal to negative liberty) (Macherson 1964, 1977). To be dependent on others, is to acknowledge that part of our life or ability is not our own or not in our control. However, ignoring this fact does not make us strong, it makes us ignorant. If Dewey and Gee are correct, we are not only constrained by our semiotic domains, we are constructed by them. The ideals we endorse, the information we call knowledge and the identities we create and embody are all constructed within and with the help of our semiotic domains and the other members in our domains. This idea has far reaching consequences in terms of our dependence on others and our community. Societies, even liberal societies, are not merely the result of some contractual agreement - neither hypothetical nor historical social contract as propounded by Hobbes, Locke, Rousseau and Rawls - but, rather, are the source of meaning. We are not atomistic individuals who temporarily and voluntarily restrict ourselves in order to live together, to put up with each other, and to tolerate one another. All we are and all we value are contained in the social landscape; in semiotic domains. To be a dependent person is to acknowledge our necessary connection to our community; that individualism comes from community (the two concepts are not separate). Our successes and failures, the way we see the world and our very selves are a product of the domains we adhere to.

More specifically, for the student, the acknowledgement of dependence to, not just a teacher and an environment, but to other learners is integral. The learning environment that is constructed in a classroom is, or can be, built on a mutual dependence between teacher, the students, and the environment, i.e., habits and habitat. Looking back at the previous chapter, Vygotsky's idea of the

Zone of Proximal Development (ZPD) suggests a necessity in having this dependence; an intersubjective relationship of intrapersonal and interpersonal dialogues. If, as Vygotsky (1978) says, “human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them” (p.88), then the dependence on the other members of the school classroom environment is necessary for learning. The ZPD argues that children can go beyond their individual capabilities when working collaboratively, and by doing so they are able to perform tasks that they would be incapable of doing individually. For Vygotsky, “the only 'good learning' is that which is in advance of development” (p.89). In other words, children only learn when they are engaged in something that is beyond their capacity, and this is what working collaboratively can achieve. Given this, the notion of *interdependence* is helpful here; mutually dependent students and teachers.

Certainty and Doubt

Closely tied to maturity and independence, the person who is certain is someone less likely to doubt or question existing knowledge. When we are certain of what we know and who we are, we act according to our most influential or dominant semiotic domain. Certainty is all about answers and knowing how to access them. Knowledge of English, Maths, Science, and other learning areas (curriculum subjects) amount to being able to provide answers to questions. The view of schools as institutions for the transmission of knowledge caters to this and provides stability for the 'smooth running' of societies. According to the Australian Curriculum,

> The general capabilities play a significant role in the Australian Curriculum in equipping young Australians to live and work successfully in the twenty-first century. In the Australian Curriculum, capability encompasses knowledge, skills, behaviours and dispositions. Students develop capability when they apply knowledge and skills confidently, effectively and appropriately in complex and changing circumstances, in their learning at school and in their lives outside school. (Australian Curriculum General Capabilities 2015)

Certainty could be said to be a desirable state, because it means students are able to apply their knowledge and skills “confidently, effectively and appropriately in complex and changing circumstances” (Australian Curriculum General Capabilities 2015). This is highlighted by the emphasis on grades as the primary method for assessing knowledge and skills. While the desire for this kind of certainty is understandable, there is something lacking that is fundamental to any

method of settling opinion or what Peirce (1877) called "fixing belief", namely, doubt. Peirce rejected certitude or absolute knowledge as this would require individuals to be absolute judges of truth which implies that metaphysics can attain certainty beyond that of the physical sciences. Humans are fallible, and, therefore, doubt has an important role to play in the fixation of belief. Doubt is a powerful but unsettling psychological state – a state of unbelief. "The irritation of doubt," according to Peirce (1877), is a "state from which we struggle to free ourselves and pass into the state of belief" (p.4). Peirce claims inquiry occurs only when we are in a state of doubt. We do not always inquire into our firmly held beliefs, and why would we? What we believe, we claim to know. No one would hold a true belief about something they do not think is true. But the things which we doubt, we inquire about. This means for an inquiring mind, doubt is essential. However, the state of irritation that is doubt does not always lead to sustained inquiry, especially not the kind of communal inquiry as the settlement of opinion Peirce had in mind. Doubt is a state of disequilibrium or cognitive dissonance that can lead to the use of other methods of fixing belief, habits we incline toward due to upbringing and prejudice; what Peirce referred to as the Method of Tenacity or refusing to consider contrary evidence, the Method of Authority or accepting an institution's dictates, and the A Priori Method or the most coherent or elegant-seeming belief-set. Thus, doubt is necessary but not sufficient for the kind of inquiry Peirce advocated. Nevertheless, Peirce did say that "[t]he irritation of doubt causes a struggle to attain a state of belief. I shall term this struggle *inquiry*" (p.4). In other words, it is the beginning of an inquiry that has the potential to be sustained as the kind of rigorous community inquiry Peirce describes in order to discuss ideas and test hypothesis, but that without facilitation from teachers children can easily revert other methods of fixing belief to which they have been habituated. Schools should, then, be concerned over doubt more so than with certainty.

In sum, we want students to be imbued with confidence in their actions, knowledge and decisions. With independence, maturity, and certainty comes the acknowledgement of a certain freedom of action. Adults understand their actions are a product of their will and entirely their responsibility as outside influences are manipulative. Adults produced by our current educational institutions are independent, mature, and certain of themselves. This, however, is only half the picture that schools ought to be painting. Our characteristics of independence, maturity, and certainty need to be tempered with an understanding, exploration, and acceptance of the kind of dependency, immaturity, and doubtfulness that is described above. Students exposed to this temperance are less likely to be dogmatic or more inclined to wonder; rather than require certitude or absolute knowledge they they see potential in inquiring about the world in which they are infallible inhabitant. In other words, instead of the necessity of being certain about knowledge, they can

embody a kind of fallibilism. They are not entirely independent of their community and so communal inquiry is also possible. They are immature enough to recognise that “growth is regarded as *having* an end, instead of *being* an end” (Dewey 2005, p.32).

A brief moment of duality

Recall in Chapter 2, Lewis' (1970) *Meditation in a Toolshed*. Lewis was discussing a dichotomy of looking, namely, “Looking along the beam and looking at the beam are very different experiences” (p.1). We can view the world by looking at or along certain things, according to Lewis. In overly simple terms, by looking at something we can study it, but by looking along something we can experience it. However, “[w]e must, on pain of idiocy, deny from the very outset the idea that looking *at* is, by its own nature, intrinsically truer or better than looking *along.* One must look both along and at everything” (p.2). Lewis' point here was to argue against putting too much weight into the scientific ideals of looking *at* the world. He isn't arguing against the scientific method, merely against the scientific method as the sole form of value.

While Lewis' point is well received in this dissertation, it is his method that I want to pay particular attention to. In the presence of two opposing positions, Lewis resists the urge to collapse them into one solution. Instead he allows for both possibilities. When presented with opposing positions, the aim of the scientific method is to discover the correct position and discard the incorrect position. The perception of certainty is one of the greatest strengths of the scientific method. However incorrect this assumption is, generally science is seen to be in the business of discovering certain 'facts' about the world. However, this is not how the scientific method works. Without the ability to dwell on and in opposing positions, our ability to inquire and learn is restricted. This ability to dwell in the uncomfortable uncertainty of doubt is the primary function of much of philosophy, and it is how contemporary philosophy and science often interact.

At the heart of play is an unwillingness to collapse dualisms that in the 'real' world we are forced to. The dichotomy represented by the scientific method and the philosophical method is representative of this. The philosophical method pushes us into the harsh light of inquiry and doubt, and the scientific method secures our beliefs . These two forces seem to be opposed, but they only function properly when they work reciprocally. We are playing with knowledge, after all.

Philosophy as Academic Play

The characteristics of dependence, immaturity, and doubt may leave some people somewhat uneasy. If Peirce's pursuit of belief is the scientific method then the pursuit of doubt, this holding on to doubt, is something else. Its aim is not the fixation of belief, but the extension of doubt. This is what play is at its heart. Play is an ontological opening. It does not embody the scientific method of fixating belief, but the method of inquiry. Play embodies this kind of inquiry; it is what is missing from schools, generally. Any education system that has a tendency to transmit knowledge through curriculum without attention to pedagogy in which children are active learners disempowers them as the method by which they need to understand how beliefs are fixed is hidden; they lack the experience of engaging in a method of inquiry through doubt. This is what we can learn from video games, because games teach through a method of play which utilises doubt to fix belief, in a temporary space.

As previously mentioned, Peirce (1877) saw inquiry as the space between two states: genuine doubt and fixed belief. To reiterate he argues that doubt "is an uneasy and dissatisfied state from which we struggle to free ourselves and pass into the state of belief; while the latter is a calm and satisfactory state which we do not wish to avoid, or to change to a belief in anything else" (p.4). Doubt and belief for Peirce, are contradictory positions. We either have a belief about some state of the world, or we doubt it. Peirce says doubt is somehow unpleasant for us, whereas belief is our natural state: "The irritation of doubt causes a struggle to attain a state of belief" (p.4). Doubt, this irritation Peirce describes, is necessary for inquiry. We do not inquire into things we believe, only those we have some doubt in.

Peirce goes on to discuss various ways in which we might get to our most desired position; that of belief. The rest of his chapter is dedicated to arriving at the conclusion that the method of what Peirce called scientific inquiry is the best way to pursue belief. According to Peirce (1955)

> In sciences in which men come to agreement, when a theory has been broached, it is considered to be on probation until this agreement is reached. After it is reached, the question of certainty becomes an idle one, because there is no one left who doubts it. We individually cannot reasonably hope to attain the ultimate philosophy which we pursue; we can only seek it, therefore, for the *community* of philosophers. Hence, if disciplined and candid minds carefully examine a theory

> and refuse to accept it, this ought to create doubts in the mind of the author of the theory himself. (p. 229)

Peirce's notion of a community of inquirers rests on his notion of scientific inquiry as "people coming together to serve as jury to ideas and hypotheses" (Pardales & Girod 2006, p. 301). Whenever people come together in agreement in such a community, i.e., a collective of individuals who employ a rigorous interpersonal method for arriving at results, only then can they speak of knowledge, truth, and reality. These terms, and their cognates, will be grounded in the community of inquirers, not in certitude or the certainty of individual consciousness. I am, however, far more interested in the first half of this discussion; Peirce's notions of doubt.

When we play, we open and enter a temporary space that has been created (either by us or someone else) for a specific purpose; to play. This temporary space works on its own internal logic and rules; it is different from the world of daily routine in which we inhabit and so is capable of other things. If we create our own world, as children often do in imaginative play, we decide what the rules are. More complex forms of play, such as games, come with rules built into the world. In both cases, inquiring into the world is necessary to understand it; just like in the actual world. The difference is, in imaginative play, as we inquire about the world we create the rules that are capable of upholding it, whereas in more complex play (games) the environment is designed to readily give us this information. In all play, then, inquiry is a necessary feature. We know from the start that the play world is not in the actual world in which we live, and this is important. We can freely inquire, and, therefore, doubt in the play world, without affecting the world of our everyday or our beliefs about them. We create an identity specifically to interact with this imaginary play world, and it is this version of ourselves that does the doubting. This gives us reason and the ability to doubt, and, therefore, to inquire.

To see the relevance here, let's change the language slightly. Let's skip to a different, but related, semiotic domain. When we play, we create a temporary semiotic domain where play can occur. Because we are in a different domain, we are able to alter our fixed beliefs (and doubts) about things we may not question in our other, everyday, world. We create a series of identities in order to interact, but still stay separated from, this domain. Our virtual identity acts as our self in this new, temporary domain, and it is connected to our real world and projective identities respectively. According to Gee, this is how we play video games, or at least how we start. For Dewey, this is how we would be taught to approach a new community.

My claim here is that the best way to approach a new community (semiotic domain) is to do so in the same way as when we are playing. Doing this means we approach any new communities with dependency, immaturity, and doubt as well as independency, maturity, and fixed beliefs. We will understand that to be an individual in a community we will in some way come to depend on it, either through our practices, ideals, or guiding principles, i.e., the individual's relationship to the community is one of cooperative intelligence. We will understand that, as immature beings, we can learn new ways of being from new communities. Most importantly, any new community must be inquired into, and therefore, we must approach it with doubt as our guide. We must not take every new community as gospel, but neither shall we dismiss it as heresy, i.e., we should enter neither with certitude nor scepticism, but with an attitude of fallibilism where we have yet to discover our prejudices to which have not yet been alerted to "begin the slow process of struggle towards change" (Burgh & Thornton 2016, p.166). Doubt allows us to inquire, and play allows us to doubt.

Chapter 4

The Extended Gamer: Video Games and the Extended Mind

The extended mind theory is an appeal to active externalism; the claim that certain cognitive processes occur outside of the brain; that objects within the environment function as part of the mind. According to Andy Clark and David Chalmers (1998), when the cognitive mind extends out beyond the body and into the world it is capable of coupling with external objects to create a new system capable of cognitive tasks. There has been a great deal written on the subject since Clark and Chalmers's original publication (Adams and Aizawa 2009; Menary 2009), but significant research hasn't really gone beyond appeals to thought experiments. We are asked to imagine a scenario where the extended mind is all but a certainty, but often these kinds of thought experiments either don't show the full depth of the theory or are fanciful in nature.

So far this dissertation has advocated a position that video games and philosophy intersect in significant ways. In the previous chapter I made the claim that video games are learning tools which help us to create new identities and integrate them into ourselves. This chapter is about building on that idea. In the first part of this chapter there will be a summary of the arguments to date on the extended mind. My aim here is not to give a full and comprehensive account of the extended mind theory and its position in cognitive science, but to explore what implications there are with this conception of the mind, and how that could impact game playing and learning. Video games specifically will give us an opportunity to look at each aspect of a genuinely coupled system. In the second part of this chapter I will show the connection between the extended mind theory and that of situated learning. The beginnings of situated learning, as outlined by Gee (2007), implicitly teach us how to extend ourselves into the world. The extended mind, on the other hand, gives us a necessary (but not sufficient) condition required for an instance of situated learning to occur.

Coupling Minds and Worlds

Clark and Chalmers (1998), contend that a "human organism is linked with an external entity in a two-way interaction, creating a *coupled system* that can be seen as a cognitive system in its own right" (p.8). Unlike the extended mind theory, traditional views of cognition place cognitive processes as firmly within the head of the individual. Cognition was generally accepted as being

individualistic in nature, where cognitive processes and the mind of the individual were held inside the head. The cognitive process construed in this way “involves the computational processing of mental representations” (Wilson and Clark 2009, p.56). Susan Hurley (1998) called this a cognitive sandwich, where cognition is the thing that takes place between perception and action. Richard Menary (2009) points out that “most philosophers and cognitive scientists take cognition to be a clump of mental acts or processes that come under broad headings such as: remembering, perceiving, learning, and reasoning” (p.229). The view Clark and Chalmers put forth in their 1998 paper is that cognitive processes can extend beyond the head and into the world.

The idea that the external world can affect cognition is not new. The individualistic version above certainly allows for the 'world' to input information into our cognitive systems in the form of perceptions. However, Clark and Chalmers are suggesting much more than this. If we take Hurley's analogy a little further, Clark and Chalmers place parts of the external world in the cognitive sandwich. The coupled system that they discuss is a combination of the individual and some part of the external world. As Wilson and Clark (2009), in a paper titled 'How to Situate Cognition', put it, “the extended mind thesis very explicitly identifies cognitive systems themselves as reaching beyond individuals into their physical and social environments” (p.58).

A simple example of a coupled system occurs during a game of *Tetris*. *Tetris* is a video game where abstract geometrical shapes appear at the top of a computer screen and move down to the bottom. The player's task is to rotate these shapes using an input device (keyboard, controller) and fit them into a structure of similar shapes. Forming a 'line', where a row of blocks goes from one side of the screen to the other, cancels out the row and gives the player points. If lines are not cleared, the screen begins to fill up, eventually ending the game. The aim is to continue to clear lines of blocks, keeping the screen as clear as possible for as long as possible. There are two tasks for the player: (1) to identify possible positions for shapes that are coming down, and (2) to rotate the shapes and fit them into the suitable position. When the player rotates the shape mentally (as an image in her mind), we think of this as a cognitive process. The input comes in (the dimensions of the shape and the possible positions it could fit) and a cognitive process occurs where the shape is rotated mentally to see where it fits. When a solution is found the output consists in the player rotating the shape to fit the desired position. However, this is generally not how people play *Tetris*. Consider what happens when the player rotates the shape before she has found a solution. In this conception, the player is rotating the actual shape in order to find a solution. The shape, the virtual world in which the shape and structure exist, and the physical controller are a part of the cognitive process in this example. The act of rotating the shape is part of the act of thinking. The shape is no longer

merely an input that is used in a cognitive process, it acts as part of the cognitive process, both giving and receiving information in what Clark and Chalmers (1998) call a feed-back loop. The act of rotating the shape is part of the thinking process in this case. This is the essence of a coupled system.

This does not, as some have asserted in the past, imbue some sort of cognitive process on inanimate objects. For example, the objection was raised as the 'coupling constitution fallacy' by Adams and Aizawa (2009), who argue that "the fact that object or process X is coupled to object or process Y does not entail that X is part of Y" (p.68). The coupling constitution fallacy misses a key aspect of the construction of an extended mind. It is true that X being coupled to Y does not make X a part of Y. What makes more sense is if X is coupled to Y to create Z, Z being the coupled system made up of X and Y. We can then say that if X is coupled to Y, then X and Y are part of Z. To talk in plain terms, a coupled system is a new system consisting of an individual and some part of the external world. This new system, according to Clark and Chalmers, can constitute a genuine cognitive system in its own right. The objection raised by Adams and Aizawa misinterprets the problem. The coupled system is a new system, one composed of part individual agent and part external world. We do not say a finger has to be a hand in order to be part of a hand. Coupling in this sense embodies the idea that integrated systems can be greater than the sum of its parts.

So where does cognition come into this picture? The example of Tetris above is more than just a coupled system. When the player physically rotates a shape in order to solve the problem of placement, she is delegating what we might consider to be a cognitive process (that of spatial problem solving) to the object itself. To defend this idea Clark (2009), in a paper titled 'Memento's Revenge', offers what he calls the parity principle: "If, as we confront some task, a part of the world functions as a process which, were it to go on in the head, we would have no hesitation in accepting as part of the cognitive process, then that part of the world is (for that time) part of the cognitive process" (p.44). This principle asserts a twofold claim. Firstly, as long as the external processes that are occurring within a coupled system are functionally similar in a relevant way to internal processes, then these processes can be counted as genuinely cognitive. The second, and deeper claim that Clark goes on to make is that while coupled systems show an extension of certain cognitive processes, there is also an extension of the cognitive *mind* out of the head and into the world. In order to understand this leap and the first claim we need to become acquainted with the classic thought experiment from Clark and Chalmers' 1998 paper, the case of Inga and Otto.

Inga has been told of a great exhibition at the Museum of Modern Art (MoMA). Because she has been there before, Inga recalls where the museum is and hops on a bus. Otto hears of the same show and decides he too would like to travel. However, the trouble with Otto is he is suffering from the early stages of Alzheimer's disease. Even though Otto has been to the museum before, he cannot remember the way. Fortunately, Otto has been carrying around a notebook for some time recording key pieces of information that he would have remembered had he been able to. He simply consults his notebook, finds the address for the museum, and is on his way.

Inga's act of remembering is, as the common understanding of cognition goes, a cognitive process. Clark and Chalmers argue Otto's act of remembering is functionally similar in relevant ways to Inga's and, as per the parity principle, Otto and his notebook coupled together can be thought of as a new system that has cognitive abilities, i.e., processing. As I have said above, the parity principle does more than show how cognitive processes extend, but also how the cognitive *mind* extends into the coupled system. This more complex argument is explained by John Sutton (2009).

> This principle motivates the idea that Otto's notebook is itself playing a cognitive role when he uses it to get to MoMA. When extended from cognitive processes to cognitive states, it also then animates the stronger claim that the *standing* information in the notebook counts as cognitive even when it's not in use, because it functions in relevant respects just as do the standing, non-occurrent beliefs and memories in Inga's brain. (p.195)

This is the most controversial point Clark and Chalmers (1998) raise. The move from extended cognitive processes to extended cognitive minds is important for Clark and Chalmer's argument, but it may be a step too far. Their argument rests on the functional similarity between Inga's and Otto's circumstances. When Inga wanted to go to the museum she remembered its location before she set out. Based on this information, it is clear that Inga believes she has access to a fact. What we can also say from this is that from Inga's perspective she *knew* the location of the museum before she had to recall that information. As Clark and Chalmers put it:

> It seems clear that Inga believes that the museum is on 53rd street, and that she believed this even before she consulted her memory. It was not previously an *occurrent* belief, but then neither are most of our beliefs. The belief was sitting somewhere in memory, waiting to be accessed. (p.12)

Non-occurrent beliefs are beliefs we hold that we have not yet accessed. I, for example, have several beliefs concerning the location of my house, the name of my dog and the colour of my car. I need not access these beliefs in order to hold them. I know they're accessible when I need them, so I can say that I know where my house is, the name of my dog and the colour of my car without actually recalling anything. Clark and Chalmers claim it is the same with Otto and his notebook. Otto's notebook *functions* the same as Inga's memory.

The functional similarity between Inga and Otto needs some clarification. In order for something like Otto's notebook to count as similar, it needs to pass certain conditions. Firstly, any object like Otto's notebook needs to be as accessible as Inga's memory. When Inga remembers something, she automatically accesses her memory to do so. She wouldn't first consult a book or a map, because she believes the information about the location and direction of the museum to be correct. Otto's notebook needs to be the first thing he accesses when trying to remember something. Secondly, the notebook should be automatically endorsed by Otto. There ought to be no question in Otto's mind about the truth of the content in his notebook. To the same extent that we assume our memories are accurate, so too should Otto be able to assume the same thing. Thirdly, Otto's notebook needs to be portable, so he can bring it to a variety of places and problems. Inga's memory store and other cognitive faculties are similarly portable. The final condition is time. A genuinely coupled system is a fairly easy and straightforward thing to do. But to step from extended cognitive processes to an extended cognitive mind takes time. I will explain this particular element in the next section.

Parity and Complementarity Principles

According to the parity principle if a genuinely coupled system meets all the above criteria, namely accessibility, automatic endorsement, portability, and time, we have a case, not just of extended cognitive processes, but of an extended mind. The parity principle offers a simplified introduction to the extended mind. However it doesn't fully capture the depth of the theory. One problem with the parity principle is the functional similarity that is required for the extended mind is too restricting. As Sutton (2009) says, “even abstracting away from incidental details of mechanism and realisation, even looking at functional poise alone, are not the format and the dynamics of biological and nonbiological representations and representational schemes just too different?” (p.197). The mind just doesn't function like a book. Memory storage, to take just this element as an example, is not static or isolated like Otto's notebook, but, as Sutton observes,

> notably, information is stored there in discrete fashion, and representations in the notebook (linguistic or pictorial representations, for example) have no intrinsic dynamics or activity, are not intrinsically integrated with other stored information, and do no cognitive work in their standing or dispositional form. (p.197)

There is another reason why we would want to move away from parity, and that is because it undermines the significance of the extended mind thesis to cognitive science. If the external elements of a coupled system mirror (at least functionally) that of internal processes, the extended mind thesis would have very little impact on cognitive science because how we view the cognitive mind would be fundamentally the same. There would still be a core cognitive mind found only inside the head of agents. This core mind could be made more efficient by coupling with external elements, but at a fundamental level cognition would be squarely located in the head. Any coupled system that we could identify would be interesting, but not terribly significant. For any of these coupled systems, we could still say of the human agent that, yes, this is where true cognition lies and these external elements are just helping the cognitive mind.

The parity principle has been called a 'first wave' theory by Sutton. He suggests that, while arguments from parity do secure at least the possibility of the extended mind, they do not go far enough. The 'second wave' theory is called the complementarity principle. Under this new principle, external elements of a coupled system need not resemble (functionally or otherwise) that of internal processes. Arguments from parity could, at best, show that coupled systems are (or could be) more efficient in their cognitive capacities; a larger system that is capable of delegating tasks to different parts of the system. However, the extended mind is about more than just showing improved efficiency. If coupled systems are made up of different but *complementary* components, the larger system would be capable of doing a greater range of tasks. It is, as Sutton says, "*because* isolated items aren't stored atomically in the brain that our relatively vulnerable biological memories are supplemented by more stable external scaffolding. Brains like ours need media, objects, and other people to function fully as minds" (p.205). The mark of an extended mind in this sense is an ability to perform certain tasks that the human mind alone cannot do. Otto's memory, for example, is unfortunately failing. However, his notebook acts as a stable, albeit simpler, form of information storage. As long as his notebook meets the requirements of portability, accessibility and automatic endorsement, Otto is capable of creating a coupled system with it that could constitute a genuine case for the extended mind thesis. The further proof for this comes when we *de-couple* Otto from

his notebook. If the extended mind theory is correct, the newly de-coupled Otto would lose some cognitive processing ability; in his case the ability to remember.

The complementarity principle also gives us a response to one of the biggest problems of the parity principle; it addresses the question 'why don't we just study the 'core' cognitive mind alone?' The complementarity principle changes the idea of what a mind *is*. It is no longer an individualistic mind that is trapped inside the head, nor is it a core mind that couples with external elements to merely boost efficiency. The cognitive mind is, I argue, highly adaptive in nature. Its fundamental feature is that it can couple with a range of external media, objects, and environments in order to increase its cognitive *ability*, not just efficiency. As Wilson and Clark (2009) point out:

> Extended cognition … occurs when internal and external resources become fluently tuned and integrated so as to enable the larger system – the biological agent plus specific items of cognitive scaffolding – to engage in new forms of intelligent problem solving. (p.64)

Extending the mind, for this thesis, is not just something the mind can do, but it is the way we interact with the world. If the extended mind (or some variation of it) is correct, it changes the way we view how we interact with parts of the world. One of the biggest problems with an individualistic view of minds comes in answering how one individual communicates with others and the world. We call it reaching out. The extended mind claims this reaching out is not just metaphorical, but an actual reaching out into the world by the individual. If, for example, the mind extends out into to physical world, what about the social world? How does this conception of individual minds change the way we view human interaction? This idea is further explored in the next chapter.

For both Sutton and Clark, the parity principle is not in direct contradiction to the complementarity principle, it is just that complementarity gives us a fuller understanding of the extended mind. There are two related issues that I need to address at this point. The first is about the varying levels of complexity in coupled systems. The second is about the step from cognitive processes to cognitive minds. First, some coupled systems are stronger than others. Very basic coupled systems may be only superficial. You may pick up a notebook and pen to write a shopping list. You then take your list and pen to the shops and tick off items you buy or add items you remember you want. These examples should be counted as genuine coupled systems, but only very weak ones. Cognitive processes are definitely extended into this system, but the cognitive mind surely isn't. The

individual does not identify with their shopping list. Second, if there is such a scale, can a coupled system reach a level of complexity that would justify the belief that the cognitive mind was also extended? To put the question another way, can the extension of cognitive processes eventually lead to an extension of the cognitive mind? In a paper concerning Satre's and Merleau-Ponty's conception of the body, Nebrojsa Kujundzic and William Buschert (1994) said:

> Both Sartre and Merleau-Ponty maintain that there are no intrinsic qualities which exclusively constitute the human body and that the human body in fact interacts with the world in numerous ways. By those very inter-reactions, the human being forms a subtle and dynamic fabric of actions shaping the world while at the same time being shaped by the world. With respect to instruments and the body, this can be described as a twofold sense of integration: the body allows instruments to melt into it (for example, wearing eyeglasses) and instruments can accommodate the body, extending its reach and abilities (for example, driving a car). (pp.207-208)

These examples could be easily classified as coupled systems. However Kujundzic and Buschert's conclusion would seem to not support a fully extended *mind:*

> Their treatments of instruments and the body suggest that, for Sartre, the body and its instruments only serve the purpose of bringing forth the fullness of the existential project, whereas, for Merleau-Ponty, instruments yield to the physiognomical gravitation of the human body. In each case, *instruments are portrayed as external, supplementary instances*. But they are not portrayed as alien substances, ontologically distanced and inaccessible. (p.213, italics added)

Despite this, the idea of instruments and the body present further possibilities in the search for a suitably complex coupled system that would allow for a mind to extend beyond the body. One example can be found in prosthetics. Craig Murray (2008) explores how “certain technologies and artifacts can mediate both perceptual and motor skills and become incorporated into the phenomenal boundaries of the body” (p.119). Prosthetics fulfil the requirements for a coupled system, and are something that is commonly identified as being a part of an individual. Eye glasses are possibly the most prevalent, but hearing aids, insulin pumps, pace makers, and prosthetic limbs are all augmentations and additions that become integrated into an individual's sense of self. Murray furthers this point:

> A number of researchers have proposed that an artificial limb may become 'part of' the user. Fraser Observed and compared the movement patterns in a proficient user of an upper artificial limb with those of the other, anatomical limb. She argued that if an artificial limb were to become part of the user, then it might be expected that the movement patterns of the prosthetic and anatomical limb would be similar. Fraser, in fact, found evidence of this. (pp.119-120)

This supports extension from the principle of parity, but the complementarity principle appears to require something more to assert some connection to the individual; namely a phenomenological connection where the individual self-identifies with the external object. Prosthetics show how coupled systems give the individual functional enhancement, but what Clark and Chalmers are asserting is *identification* with part of the external world. It is this element which can show the difference between a simple coupled system and a complex system that allows for the extension of the mind. While prosthetics may be able to show this, I want to explore another example that can hopefully show the process of identification in action. Video games give us access to a virtual space that was previously inaccessible to us. In this sense, we have a full-body prosthesis in the form of an avatar which we inhabit in order to interact with the world of the game. The example of *Tetris* at the beginning of this chapter showed video games can constitute simple coupled systems. What I would like to explore is the possibility that some games ask us to identify with them, as per Gee's theory in the previous chapter. In order to fully explore this idea, I will examine a game that I believe will show the kind of extension Clark and Chalmers are looking for. The game is *Mincraft*.

Extending to the Virtual

Minecraft is a simple enough game to understand. You begin in a stylised three dimensional environment. The game is set in a first person perspective. This means you don't see your playable character or avatar when you play; you see the game world as the playable character. Everything you see is made up of 'blocks'; the dirt at your feet is compiled of blocks, the trees and leaves are blocks, even the clouds in the sky are blocks. Gameplay in *Minecraft* is about manipulating these blocks. You can dig in the ground and collect dirt blocks, and you can 'punch' trees down and get wood blocks. You can even find stone and coal blocks. Combining materials you find in certain ways constructs tools and other objects. Make a pick axe and you can cut through stone, or combine a stick of wood with coal and you can make a torch to light dark areas. From here the game's complexity increases exponentially. Creating more complex items requires materials that are harder

to find. An iron sword is stronger than a stone sword, but a diamond sword is stronger still. Mine carts, tracks and even powered rails can also be built, but only if you have the right materials and know how to put them together. *Minecraft* is a sandbox game; a sub-genre of video game that is all about exploration and free play. It is a game that requires a great deal of problem solving and creative thought.

Similar to the game of *Tetris*, a coupled system can be identified in *Minecraft*. The player moves her avatar around the world looking for raw materials to mine and craft. During this process, what constitutes as part of the system? According to Gee, the player identifies with her avatar, making them functionally two aspects of the same person, so both of those elements must be present in the coupled system. The avatar is the player's virtual self, the part of her that exists only in the game. The controller and the screen also seem to be important parts of this system; the controller is our direct input into the virtual world and the screen allows us to 'see' the virtual world. What I am not including in the coupled system is the computational device that is running the game. In one sense, the computer that is running *Minecraft* is controlling all the inputs and outputs from the controller to the screen, and so cannot be absent from this kind of coupled system. However, this would amount to including the whole world in this one system, and that seems to be equally incorrect. In the case of Otto, while we count Otto and his notebook as part of a coupled system, we don't count the world, the street he is standing on, the museum, or the bus he takes to the museum as part of the system, yet these elements are all present.

What is most important about this example is that Otto is only *identifying* with his notebook. This gives us a new distinction to make between coupled systems and an extended mind. While coupled systems are made up of an agent and elements from the external world that combine to form an entirely new system capable of cognitive processing, it is only the elements of a coupled system that the agent *actively identifies with* that can constitute part of their extended mind. In this case, the computer that runs *Minecraft* can be included as part of the coupled system, just not part of the extended mind. The cognitive *mind* only extends to the players avatar, as this is the only part of the coupled system that she actively identifies with.

How does playing a video game meet the requirements of a genuinely coupled system? The requirements of accessibility, automatic endorsement and portability must be dealt with. Does the player automatically endorse each element of the coupled system? The interface, for example, uses a set configuration of keys and mouse clicks in order to achieve a desired result. When I want to move around, I use the movement buttons. In this case they are W, A, S, and D (forward, left, back

and right respectively). This is not questioned, it just is. The more you play, the less you think about the buttons W, A, S, and D and the more you think about forwards, left, back and right. Similarly, when playing a game you don't need to question the information on the Heads up Display (HUD). The HUD gives the player key information about the game and the playable character. In *Minecraft* it shows you how much armour you have left, as well as how hungry you are and an inventory of the items you can use. If your health meter says 50%, you automatically know you have lost half your life.

The conditions of accessibility and portability bring up an interesting aspect of coupled systems. When we have looked as past examples like Otto and his notebook or a person with a prosthetic arm, we have been envisioning permanent extensions. Otto will use his notebook for the rest of his life, or for as long as he can. When our amputee is fitted with her prosthetic arm, it is a permanent fixture. In these cases accessibility and portability are key markers for a strong coupled system. But video games are not permanent. I will not be playing *Minecraft* for the rest of my life, and as such the coupled system I create in order to interact with the virtual world of *Minecraft* need only be reliably accessible for the period of time that I am playing. As far as portability is concerned, because this coupled system is solely used to interact with the virtual world of *Minecraft*, I only ever need it while playing *Minecraft*. In these terms, my coupled system passes both the accessibility and portability tests because I will always and only ever use this coupled system to interact with the virtual world of *Minecraft*. This is true of a great many coupled systems. They are often specialised systems that are brought to bear only on specific situations. For example, I only need to be coupled with my tennis racket while playing tennis, or I only need goggles when swimming. In the same way, in games like *Minecraft*, I only need to know my level of health and armour when I am playing the game. These conditions, then, don't seem to be able to tell us a great deal about different kinds of coupled systems. There must be other conditions better able to identify coupled systems of this nature.

Wilson and Clark (2009) do a great deal of work in differentiating different coupled systems. Situated cognition is an umbrella term they use to talk about various types of extension of the mind. They develop what I think of as a working scale of extension. On one side of the scale are 'Transient Extended Cognitive Systems' or TECS's. According to Wilson and Clark, “A TECS is a soft-assembled whole that meshes the problem-solving contributions of the human brain and central nervous system with those of the (rest of the) body and various elements of local cognitive scaffolding” (p.65). TECSs can be one off or reoccurring couplings that can be brought to a range of tasks. Simple systems might include a pen and paper, map, or controller and “it is these very

ensembles that are locally at work in many of the most distinctive cases of human reasoning and problem solving … we alone on the planet seem capable of creating and exploiting such a wide variety of cognition-amplifiers" (p.66). The other end of this scale is the extended mind: "the extended mind idea thus simply takes the kinds of observation that already motivate interest in TECSs, and asks what would happen if some such organisation were made permanently available" (p.66). How Wilson and Clark gauge where something falls on the scale is based on "the *durability* and *reliability* of the relationship between agent and resource" (p.65, italics added).

In the case of *Minecraft*, it seems to be that the coupled system is a fairly low level TECS, at least for someone playing for the first time. But it won't necessarily stay that way. The conditions of durability and reliability strengthen over time. It is because of this that playing a game like *Minecraft* can begin as a TECSs and, potentially, an extended mind can eventually emerge. In order to show how this is the case, I need to look back at the previous chapter on situated learning.

Identifying With and Expanding Into

In Chapter 3 I looked at Gee's claim that video games are paradigm examples of effective learning activities. Gee (2007) begins with a fairly innocuous point, "We always learn *something*" (p.23). This is not to say that in any activity we are bound to pick something up that we call learning. He is making a claim about learning in general, and that the something we always learn "is always connected, in some way, to some semiotic domain or other" (p.23). Semiotic domains give context and meaning to information. When we learn something out of context, it is as passive content. We have the information stored, but we have no context for this information, and because of this no way to use it. Mathematics is one example. In any given high school maths class on any given year there will be at least one student who asks 'When will I ever use this in real life?' As an adult, it sounds like a naive question or the result of ignorance. When don't we use mathematics in everyday life? But as teenagers, many students are taught maths without any context and outside of the semiotic domain of mathematics. Our semiotic domains are like sub-cultures. Different things have different meanings in different contexts. In the semiotic domain of mathematics, for example, Pi is one of the greatest marvels of our world. Outside of this semiotic domain, back in our high school classroom, Pi is just a string of numbers that has something to do with circles. As Gee says:

> The problem with the content view is that an academic discipline (or any other semiotic domain, for that matter) is not primarily content, in the sense of facts and principles. It is primarily a lived and historically changing set of distinctive

> social practices. It is in these social practices that 'content' is generated, debated, and transformed via distinctive ways of thinking, talking, valuing, acting, and, often, writing and reading. (p.22)

When we learn something within its semiotic domain, it becomes powerful. Gee suggests, when we learning something in the right context, we are not only able to understand a part of its semiotic domain but we are also able to produce new meanings within that domain.

This is, broadly speaking, the foundations of situated learning. First proposed by Jean Lave and Etienne Wenger (1991) as a model of learning in a community of practice, situated learning is becoming more associated with technology (Collins and Halverson 2009; Ernst & Clark 2009). Situated learning which arises from psychology, anthropology, sociology, and cognitive science (Anderson, Reder & Simon 1996; Vincini 2003), "takes as its focus the relationship between learning and the social situation in which it occurs" (Hanks 1991). Moreover, it involves not only raw or passive content, but immersing oneself into a semiotic domain. The more we associate with a given semiotic domain, and the more we take on or endorse the values and practices of that domain, the more we are able to become what Gee (2007) calls *producers* of content. In Chapter 3 I discussed what we can learn from playing video games. The semiotic domain of video games, I concluded, is ideal for the creation and integration of identities. Gee's idea is that "[a]ll learning in all semiotic domains requires taking on a new identity and forming bridges from one's old identities to the new one" (p.45). Gee identifies three distinct identities at play in this process; the virtual, the real world, and the projective identities.

The virtual identity is the virtual character in game. In the case of *Minecraft*, it is my avatar. The real world identity is the player playing the game; Liam, as a person playing the game. The projective identity represents the interactions between the virtual and real world identities. It is what I (real world self) want my virtual character to *be* or become. The projective identity does a lot of the work. If I am the real world identity, and my virtual identity is myself as someone who is *situated in a particular semiotic domain*, my projective identity is that which connects the two. The projective identity also shapes and reshapes both my real world and virtual identities as time goes on.

How, then, does the idea of situated learning help with the extended mind thesis? Both the ideas of situated learning and situated cognition are committed, in some way, to the idea that the external world plays a crucial role in creating and developing parts of ourselves that we once thought of as

solely internal. Learning and identity formation takes place in a social setting, which includes reflecting, interpreting and negotiating with others. We are social beings, and not just in the sense that we are part of a society. Society, the external world, *is a part of us*. Not in a metaphorical sense, and not in a community spirit sense; nothing that vague. The idea that we are confined to our bodies, or our heads, is not applicable. Situated learning shows us that we identify with certain semiotic domains. We do this so that we can identify ourselves, or at least a part of ourselves. The more we identify with a particular semiotic domain, the more that identity can be integrated in with our other identities. Situated learning is all about playing with identities. We play with our semiotic domains, the ones we form a stronger bond with are the ones that become parts of ourselves. The others we leave behind. In a school, for example, each subject represents a new semiotic domain, a different way of thinking and viewing the world. We are drawn to the ones we value and drop the ones we do not. The single greatest threat to this system is that if teachers don't teach the value of different semiotic domains. I mean this in two ways. Firstly, that there is no pedagogical emphasis on valuing of individual semiotic domains through engaging in inquiry or other collaborative learning activities, e.g., students are not engaged in discussion on why maths might be fundamental, or why English could be important. Didactic approaches to teaching or banking conceptions of education tend to impose such values on students rather than engage them in discovery through active learning. Secondly, we do not value the perspective we get when we are part of a range of semiotic domains. When we have a range of perspectives, a multiplicity of opinions, facts, or other options at our disposal, we are better able to make decisions. I will discuss this at great length in a coming chapter concerning autonomy. Suffice to say, situated learning gives us the atmosphere necessary to cultivate this thought.

Situated Cognition

Situated cognition; the idea that some cognitive process extends beyond the body, represents the mechanics behind situated learning (Wilson & Clark 2009; Menary 2009). In both cases the fundamental starting point is *embeddedness* in the external world (Sutton 2009). The mind comes out of its shell, like a turtle, to experience something; to learn something. When we identify with a semiotic domain, we are forming a coupled system with either the physical or social aspects (usually both) of that domain. This coupled system allows us to play with the semiotic domain (and the values and knowledge within) *without having to accept it*. As time goes on, we will either accept more and more of the semiotic domain as part of ourselves, or reject it as not part of ourselves. Either way, we are forming an identity that will be integrated into our own. If we accept the values and perspectives of the semiotic domain, the coupled system we use to interact with it

becomes stronger. No longer are we merely extending our cognitive processes. When we identify with a semiotic domain as something that is fundamentally part of us, we are asserting that these cognitive processes are *our* cognitive processes, these values are *our* values, these beliefs are *our* beliefs, that this is who we *are*. This is how the *mind* extends beyond the body.

Let us situate this raw information into some domain. *Minecraft* is my chosen domain. When a player first begins a game of *Minecraft*, she starts off not knowing what is going on. If she has not played many video games before and maybe doesn't see the point, she's not going to play for very long. As you may recall from Chapter 2, Huizinga (1950) says that play only occurs voluntarily. It is the same with accessing any semiotic domain. In Chapter 3 I talked about identities that prevented our access to other semiotic domains. Identifying with a semiotic domain that values adult dispositions and, perhaps sees video games as childish and useless, is going to clash with trying to identify with a semiotic domain that values video games as a legitimate use of time. Or, identifying with a semiotic domain that doesn't value school and sees it as a waste of time is definitely going to clash with any semiotic domain concerning school and learning.

Let's say our player identifies with a semiotic domain that values video games. In order to interact with the game, she must use one of the controller options. This controller forms part of the coupled system that will be necessary to play. The controller acts as a bridge, a way for two other aspects of the coupled system to communicate. The player and the in-game avatar form the other two parts of the coupled system. Genuine interaction goes on between the player, the avatar and the controller. There is a feedback loop that is created that allows some of the players' cognitive processes to extend out of her head and into the coupled system.

A very simple coupled system is formed whenever we start to play a game. This coupled system gives us temporary access to a new semiotic domain; in this case, the world of *Minecraft*. The more we identify with this semiotic domain, the more we get to define what kind of value *Minecraft* has, and what kinds of things we can value in *Minecraft*. *Minecraft* has a particularly large set of possible values. There is no push to follow the main storyline, so how and why *Minecraft* becomes valuable is up to the player. This game is a particularly good example because of the community that exists around it. There are two reasons for this. The first is the online portion of *Minecraft* is heavily community based. People form factions together, build and live in villages together, and war and trade with each other. The second reason is the community is entirely responsible for its own semiotic domain. When it was first released, there was no information on how to play, or what to do in game. Traditionally, video games have all of this information at the beginning of the game.

Minecraft has no such introduction. What the creators of the game did do was to encourage the sharing of information about the game with others. Within a short amount of time, Minecraft had an extremely strong online community entirely based around teaching newcomers how to play and what can be done, and allowing veterans to push the boundaries of the game in new and interesting ways.

Something happens when we play a video game that doesn't happen with any other media we consume; we identify with it (Gee 2007). While it is true that many people identify with characters in books and movies, the only time we identify these characters as ourselves (or part of ourselves) is in play. When we play in this manner, we voluntarily forego our own identity (or part of it) to become someone else. Because this is temporary (see Chapter 2), there is no risk involved to ourselves. We might fantasise about being Luke Skywalker when watching *Star Wars*, but we do not identify *as* Luke until we are playing later on in the back yard with a stick. In more passive forms of media we idolise, we admire, we may even imagine parts of ourselves that are like our favourite characters, but it is not until we are playing that we identify ourselves *as* the character. I *am* Luke Skywalker in my backyard, my stick *is* my Lightsaber. As in all play activities, we engage with other identities for purely intrinsic reasons. The more we play, however, the more this other identity becomes a part of us. This, in turn, strengthens both our connection to the semiotic domain and the coupled system. One of video games is as a platform that feeds this aspect of play by giving us an avatar to identify *as.* Sometimes that will be our beloved characters like Luke, and sometimes it will be a nameless and faceless generic avatar, like in *Minecraft*, that we can pour ourselves into.

For Clark and Chalmers it is non-occurrent belief that secures the move from extended cognitive processes to extended cognitive mind. When we pretend through play (in the case of a game, as an avatar) it encourages imagination in which we play with beliefs and values. The actions in *Minecraft* have value. Science has value. We suspend our doubt about this ruse in order to fully explore and understand through our imagination. If, in the course of exploration, we find ourselves identifying with the part of us that is pretending, we stop pretending. This is how we identify with a belief.

Can video games cultivate a coupled system strong enough to show a case of a genuine extended mind? Certainly, video games exhibit a strong ability to cultivate weaker coupled systems, or TECS, with relative ease. One objection to these systems becoming strong enough to support a case for the extended mind is the temporariness of the connection. We only play video games for a limited period of time. However, the power of the extended mind is not that strong coupled systems

permanently forge a bridge between the mind and the external world, but that weak coupled systems make connections that become progressively stronger with use (Wilson & Clark 2009). This process is known as *learning*, and it is the primary thing we do when we play. When we identify with some semiotic domain, or some field of knowledge, or some virtual character in a virtual world, we gain knowledge of ourselves and of the external world.

I do think the mind extends beyond the body, and that when we play we demonstrate this. Situated cognition and situated learning are different aspects of the same system. How we interact with and explore the external world is by extending ourselves into it. One effective way, if not perhaps the most effective way of achieving this extension is through play. Play gives us a safe zone to extend into. Cognitively, play allows us to form coupled systems that need not be integrated. We can extend ourselves tentatively, and build on those extensions over time. This is how the mind extends beyond the body. In this chapter I have discussed a different way of conceiving of the mind and how it interacts with the world. In the next chapter I will link this concepts on autonomy and identity.

Chapter 5

Playing in the Intersection: Intersectional Autonomy and the Playful Attitude

The playful attitude is an autonomous one, but what does this claim amount to? Are we autonomous like the Kantian individual; independent, free, atomistic, and separate? Or are we more relational, communal, and extended? Are we like Heidegger; a force in the world, a setting upon; or are we set upon? Are we Plato in his cave, struggling to understand this and that reality? Does illusion or coercion prohibit, inhibit, or help to exhibit autonomy? Autonomy is not simply a matter of freedom and restraint, but of authenticity of action. It is less a rigidly definable concept as it is a collection of loosely overlapping descriptions, and there is much contention as to which descriptors fit. John Christman (1989), in the introduction of his book *The Inner Citadel*, describes it as "an authentic and independent self" (p.3), and "a psychological ability to be self-governing" (p.5). Catriona Mackenzie and Natalie Stoljar (2000) highlight "the idea of self-determination or self-government" (p.5). Adding to this, Diana Meyers (2000) lists "self-knowledge, self-definition, and self-direction" (p.156) as important traits.

Christman's view in many ways reflects the traditional Kantian view of the autonomous individual. This conception of autonomy identifies the individual as existing in, and in conflict with, the community; a rational entity who must strive to be free from coercive social forces. According to Kant, one must rise above the community in which we live and assert independence; independence of thought, action, and consequence. With the rise of feminist philosophy, we are able to throw away the shackles of this kind of oppressive, unrealistic freedom (Beauvoir 1972; Wollstonecraft 1971). Traditionally masculine ideals held the autonomous individual as the goal for all reasonable agents. Indeed, some feminist philosophers have argued that this masculine view of reason "lies deep in our philosophical tradition" (Lloyd 1993). In the classic liberal tradition, with its presumption of limits on the state based on the social contract, as rational beings we are to accept restrictions on our freedom to regulate civilised society. However, the ideals of the Kantian autonomous individual would, at the same time, have us rise above our restrictive society in order to live as a free and authentic self. Given this, the ideal agent is expected to live in civil society, but by their own law as self-governed. This tradition asks the rational agent to live in contradiction.

I would like to explore the possibility of one alternative view of autonomy, one that is the direct result of the arguments presented in the previous chapters. I will not give an exhaustive defence of this formulation of autonomy, but rather, I will discuss how each element of my thesis points to its possibility. The playful attitude, the concepts of play and games, the particular formulation of learning and education as outlined by Dewey and Gee, the concepts and possibilities of extension, all find their confluence in autonomy. The playful attitude is about self-creation. Self-creation requires self-knowledge, self-definition, self-direction, and self-determination (Mackenzie & Stoljar 2000; Meyers 2000). I have called it an ontological opening; of action, thought, and self. We create when we play. This is why play is such a powerful learning tool. What we create are ourselves and others, our communities, our values, and beliefs; but this does not occur in a vacuum. We create our selves within our communities and our communities around our selves. We create ourselves in relation to others, and identify (and in some way help to create) others in relation to ourselves; a relationship between habit and habitat. Habit and habitat, for Dewey, are reciprocal and each is determined by the other. Therefore, the self that is created is a communal self, and the community that is created is a community of individuals. For Dewey, there is no conflict between the self and the community, because of this reciprocal nature; this dualism between individualism and communitarianism is collapsed (Bleazby 2006, 2013). What I am describing, broadly speaking, is a *relational* form of autonomy. Relational autonomy doesn't overcome socialisation; socialisation is a part of the process of authentic self-creation. I will show how learning through play accomplishes this.

Feminism and the Intersectional Self

One of the common conditions of autonomy is knowledge of the past. Knowledge of our past experiences, communities, and the origin of our beliefs and values can give us insight into who we are (Mackenzie 2002). However, this knowledge is more than just memory. Several accounts of autonomy require the individual to be able to critically reflect on their past and endorse or reject past actions, as well as assess how their beliefs and values were formed (Christman 1989; Mackenzie 2002). Acceptance of how we came to be who we are is a condition for these theories of an autonomous self. Mackenzie (2007) takes this a step further and suggests our future selves also have an effect on us.

> The past and the future inhere in our present and they do so in two interrelated ways. First, because our present perspectives or points of view trace out a particular temporal trajectory, they are characterised by a present awareness of

> the influence of our past and a present concern for our own future … The second way in which past and future inhere in the present is in the content of our present mental states, which include memories of past states and previsagements of future states. (pp.129-130)

How we identify with our past and future experiences affects who we are now in the present. For the past this amounts to remembering and reflecting. Analysing the past is about interpretation: Why did I do that thing? Should I have done it? What else could I or should I have done? For the future, however, we project possibilities. Analysing the future is imaginative and playful; given who I am, who will I or who can I be? What kind of person we want to be directly effects what kind of person we are and might be, in the same way that knowledge of the person we were in the past effects who we are in the present. Interpreting the past allows the individual to critically reflect on their actions. Part of that reflection is identifying the origin of our beliefs and values. If our beliefs and values are all socially constructed, the act of critical reflection ought to be able to show where these beliefs and values came from; to what semiotic domains they belong. Whereas imagining the future shows us different possible selves, critical reflection has a different role here, in that imagining the future entails evaluating our beliefs and values now; what semiotic domains am I a part of in the present. Mackenzie's focus is the concept of imagination; she wants "to lay the groundwork for an investigation of the connection between autonomy and the imagination by investigating the role played by imaginative thought in self-understanding, self-reflection, and practical deliberation about the self" (p.125). This power of imagination is essentially the playful attitude, as imagination itself is playful (see Haynes & Murris 2013). We imagine our future selves by creating a temporary world designed to be like the future and 'play' with possibilities. Our past reflections, too, show themselves as playful. Interpreting what has happened to us amounts to playing with the raw information of memory. This is partly because our memories can be inaccurate; even recent memories require the proper interpretation to fully understand and accurately judge. However, there is also the notion that our memories are always from our perspective. Understanding another's position requires us to imagine the world from a different perspective. This is, of course, where the Deweyan notion of communication comes in; in order to understand another's perspective there must be some common ground for communication to occur. Our communities of learning, our semiotic domains, provide this common ground. This also applies to internal communication as self-knowledge requires an understanding of our self; an internal dialogue. Knowledge of our past selves and knowledge of how we want our future selves to be is a necessary, but not sufficient, condition for autonomy. Critical reflection is necessary as it aids in self-definition and self-knowledge, however, this does not produce autonomy. This is because the

process of critical reflection is one that, like everything else, is learnt through communities; our semiotic domains. Under these conditions, "imagination is not an obstacle to reason, nor merely a valuable and distinct capacity, but rather an integral element of all thinking" (Bleazby 2012, p.96), including "self-understanding, self-reflection, and practical deliberation about the self" (Mackenzie 2007, p.125), and, therefore, autonomy.

Mackenzie further explains in her paper that integration is a necessary condition for autonomy. Given our past, present, and future experiences are all experienced by same person, they ought to all align in terms of core beliefs and values; the autonomous individual is one that persists through time *as the same person*, according to Mackenzie. Integration is a method of coming to know our selves. While someone may be a member of several domains, they are at heart one individual 'playing' different roles. An integrated self is one that ought to be able to accomplish this without ever risking their 'core' or main identity. However, the whole reason why play is so integral to our self-conception is precisely this power; at any time an identity we are 'playing' with can become a part of our selves. Without this possibility, we cannot honestly and authentically have genuine doubt, in a Peircean sense, and, therefore, we cannot inquire into any part of our selves. This raises an interesting point about play and learning. As per Gee's (2007) learning principles, the playful attitude allows us to create simplified worlds where learning can occur in a highly controlled environment. According to what he calls the Psychosocial Moratorium Principle, "[l]earners can take risks in a space where real-world consequences are lowered" (p.222). The play world is a temporary space where values, knowledge, or beliefs can be inquired into and tested without having to question or risk our previously held values, knowledge, or beliefs. As long as play remains play, as long as it stays 'not real', in the way that is outlined in Chapter 2, it is not risky at all to the individual. However, in this state, play cannot affect the individual in any permanent or lasting way; in the way schools want to. Given this, any effective learning activity will need to have built into it the ability to jump from the play world to the real one; the point where play stops being play. This is the point where the values in the play world, the temporary space, become valued in the real world, in a permanent space.

If play is necessary for self-definition and self-knowledge, integration cannot be. To show why this is the case, Diana Meyers (2000) offers a variation on relational autonomy in her article on the intersectional self. She says: "The idea of intersectional identity is premised on the general philosophical thesis that who one is depends on one's social experience" (p.153). This is akin to Dewey's theory of education; who we are is determined by our social relations. In line with Dewey, Meyers argues that the individual self is made up of a series of social relations; relations to semiotic

domains and to people within those domains. Very broadly speaking, each person's network of relations, their web of domains, is what makes up their identity. Whereas Dewey is concerned with the whole network and how that constructs an individual, Meyers focuses on the intersections between domains, and how that differentiates each individual from everyone else. All of our beliefs and values, everything we use to make decisions, comes from our web of domains. How deeply we are connected to a domain will influence how much of that domain adds to our values and beliefs. Relational forms of autonomy can account for this kind of self. Intersectional autonomy is concerned with how the individual functions within this web of communities.

Playing in Intersections

The playful attitude gives us the ability to explore semiotic domains of which we are not yet members. It is an ontological opening in that it is how we expand and extend our selves into new domains. New domains bring with them new ideas and values and, through the process of habilitation (Anathamatten 2012), we are changed by, and are a force of change for, these domains. One direct effect of this is that we add to our self-knowledge. The semiotic domains that we identify with and the ones we discover become pivot points in our social landscape. The more embedded we are to a particular semiotic domain, the more dominant its effect will be. Oppressive domains limit the effect of other domains of social organisation by revealing themselves as the only axis of identification. I will look at these oppressive domains later in this chapter, but, for the moment I am more concerned with the positive effects of intersectionality. Instead of focusing on the oppressive nature of an intersectional self that is dominated by one domain, I want to explore how this kind of thinking can help to develop autonomous selves that are more aware of their intersectionality. Of course, it is still important to acknowledge that all domains have an effect on us; they exert a force on us. Membership in any domain means taking on some set of the values of that domain. As Cynthia Levine-Rasky (2011) argues:

> Dominant positionality is embedded in intersectionality theory in two ways: (1) as part of a complex, postmodern identity formation in which – even at the individual level – oppression co-exists with domination. No 'pure' position exists. Identity is not static nor attributional, but emerges from particular social processes enabling political practice; (2) in the emphasis on relationality in which oppression and domination are co-conditional. (p.243)

Forces of domination and assimilation exist within each and every domain; it is how we are recruited into them. Habitat, for Dewey, coerces. However, the greater our web of domains, the more we are able to resist domination from any one source. Habits, for Dewey, act on our habitat even as they are being acted upon. Habits formed from multiple sources, from multiple domains, shape and are shaped by habitats that exist in different domains. Our personal habilitation is an act of overlapping domains where habits and habitats can be shaped and reshaped. Where there are overlapping domains, there are lines of intersection. Through the process of habilitation, we can at the very least understand these lines, and maybe even act upon them. In effect, with more sources of identification, we are able to engage in more social relations that are balanced; relations of power that are not oppressive. In doing this, we not only change who we are, but we also change the domains we live in.

I struggled to find one video game that would show a relational, intersectional, autonomous self in action, and I came to the conclusion that no such game exists. This is because autonomy cannot be expressed in one semiotic domain. As Levine-Rasky (2011) says, "identity is experienced not as composed of discrete attributes but as a subjective, even fragmented, set of dynamics … Moreover, who one 'is' is not static; it is wholly relational to others, to culture, and to organisations in which one moves. Identity is elected *and* it is emergent in relation to power" (p.242). If, as I claim, play is an ontological opening, then autonomy is the possibility for ontological movement. The self Levine-Rasky is describing here is one that can move between domains; a self who is defined by the type, number, and quality of the domains they identify with as connected and intersecting. Therefore, the intersectional self is one who understands that their autonomy is directly related to the amount of domains they could move to and through. So, while there is no one game that can show this, the video game player, the gamer who plays a wide range of different games, is someone who can freely move between various game domains at will. This kind of gamer is enriched in the same way that a student who genuinely moves through a range of subjects is enriched. The most important thing we can learn from this is that, as Levine-Rasky (2011) says, "[i]dentity is thus transformed from object to process" (p.243). Relational autonomy is concerned with the idea that our identity is made up of the network of semiotic domains of which we are members. Intersectionality theory highlights the importance of not just the network of domains, but how they intersect and affect each other.

Where Mackenzie stresses an integration of selves, proponents of intersectional autonomy, like Meyers (2000), explore the opposite. Meyers approaches intersectional autonomy much like most of the literature; from the perspective of minority and oppressed social groups. Intersectionality, she

says, “is currently the reigning feminist metaphor for complex identities insofar as they are constituted by race, ethnicity, class, and sexual orientation together with gender” (p.154). The straightforward reason for this is because people who belong to marginalised or oppressed social groups appear to be more identified by their group memberships. Anything that is outside of what is perceived to be a norm in a given community is a powerful marker for our identity. Being gay, for example, is much more of a statement in our current Australian culture than being straight. Homosexuality is an identifying mark in a way that heterosexuality is not. Similarly, being black, a woman, Muslim, or transgender make it easy to identify as belonging to a semiotic domain that has a direct effect on our identity. My point here is that if we can recognise that being black, a woman, Muslim, transgender, or gay as something that directly affects who we are, we should also recognise that being any skin colour, a man, Christian, Buddhist, Jew, transgender or cisgender, gay or straight, equally has a direct affect on who we are, how we process information, and how we see the world. We cannot help but be habilitated. The problem with only identifying the oppressed and marginalised domains as those which imbue identity is that we are adding to the idea that these domains, and only these domains, are identifying markers because they are somehow different to other domains. To quote Meyers (2000) again:

> Equated with humanity itself, maleness and heterosexuality go unmentioned, whereas womanhood, homosexuality, and bisexuality are mandatory and salient categories of self-description. Although people are intersectional subjects, many of them do not know it, for our discourse exaggerates the significance of some group memberships while discounting the significance of others. But to lack self-knowledge is to lack autonomy. (pp.157)

What Meyers is getting at here is that this puts marginalised and oppressed groups in a better position in some respects and worse in others. Those who recognise their intersectionality possess a better understanding of the complex being that they are. Marginalised groups are more likely to achieve this because they are forced to do so. In this sense, they are better off than those who are not forced to identify their sexuality, or race, or religion; those who do not know themselves as well, and are, therefore, less autonomous. Having said this, this heightened sense of self is not enough to counter the oppressive nature of this forced exposure when others who are not forced in this way are not exposed.

We are defined by membership to our various communities or domains. We are born into some domains while others we choose or find ourselves in. Many of our domains fall between those we

chose and those we find ourselves in. It is indeed a contentious issue as to which domains are chosen and which are thrust upon us. Arguments for and against gender being a choice, for example, raise questions about what kind of value gender holds in a community. Regardless, membership to any domain means taking on some set of the values and beliefs of that group. Both Dewey and Gee recognised how a person is changed just by being a part of a specific domain. However, what neither Dewey nor Gee argued for was the integration of these various identities. Gee, on several occasions, mentions building bridges between identities, but never collapsing them. Dewey argues, as we become members of different domains, we increase our ability to communicate. By this I mean two things. Firstly, being able to communicate means being able to share our experiences with others and being able to understand the experiences of others. Secondly, the ability to share our experiences means being able to fully understand our own experiences. In other words, effective communication between people requires self-knowledge.

Oppression, Addiction, and Social Death

One of the ways in which the intersectional self is powerful is in the face of oppressive social semiotic domains. Oppressive domains are ones which limit our autonomy, which have a harmful effect on our identity, and narrow our scope of action in some way. One argument often thrown against many forms of autonomy, including relational autonomy, is the problem of oppressive social norms. If there is no escape from socialisation, how can we identify an oppressive norm when you're in one? How can you escape oppressive domains, especially ones into which we are born or cannot control? The answer is that we don't need to, because “to have an intersectional identity is to belong to a number of groups and not to belong wholly to any” (Meyers 2000, p.163). Understanding ourselves as intersectional allows us to identify with potentially oppressive domains without having to be defined solely by them because we belong to a range of domains. In fact, oppressive domains become a source of power for the intersectional self. Indeed, as Meyers (2000) points out, “[d]espite long histories of oppression, subordinated social groups have sustained traditions that are worthy of respect and that many group members willingly uphold. Thus belonging to a group is often a source of sustenance and guidance” (p.163). It is only when oppressive domains constitute our only identifying marker that they become inescapable. Consider the slave; the slave was defined by just one of their domains, usually race. In the past, many communities saw certain races as inferior to others and classed them as sub-human. Being defined as 'slave' locked people into a semiotic domain that they could not escape. They could not be anything but a slave. They could not redefine who they are. The semiotic domain of slavery is oppressive in that it prevented its members from joining any other domain, locking them into one

set of beliefs and values. The defining feature of those beliefs was that, as a slave, they were not fully human. While slavery has not been eliminated, and exists in various forms today, a different kind of oppressive domain that is prevalent in contemporary society is addiction. Passion becomes addiction when it is a person's sole defining feature. It doesn't matter what they are addicted to, drugs, games, food, or adrenaline, they are as a slave to it. Whatever domain a person's addiction is attached to, becomes the person's oppression. Addiction, in this sense, is a limiting of the self. It is a narrowing of an individual's web of semiotic domains. In his paper 'Identity and Recovery', Scott Kellogg (1993) "[e]xamines the process involved in successful recovery from addiction through the lens of identity theory" (p.235). Based on a series of studies on different addictive substances such as heroin and alcohol, Kellogg theorised a similarity between all forms of addiction. He did this by analysing several different methods of recovery and found that each focused on the alteration or recreation of the addict's identity. He identifies three ways of doing this:

> The first path to becoming an 'ordinary' person was *identity reversion*. In this situation, the addict returned to a former identity that had been on hold during the addiction and which had not been impacted by the addiction. The second path was *identity extension*. This refers to the focusing of one's energies and attention on an identity that was co-existent with the addict identity. This identity was either untouched by the addiction or not so badly damaged that it could not be salvaged. The third and final path was *identity emergence*. In this case, the individual forged a new identity, an identity that was not related to his or her pre-addict or addict life. (p.236)

The addict identity, for Kellogg, was something that could take over all aspects of an individual's life. Addiction, in any form, is detrimental to our identity, according to this theory. It is detrimental because it is a limiting of action. If all I can be is an addict, I cannot be anything else. This by no means encapsulates everything concerned with addiction or discrimination. However, it does offer an interesting look at the individual harm in limiting ourselves in this way. Lisa Guenther (2013) takes this idea to its most extreme conclusion in her book, *Solitary Confinement*.

> Solitary confinement deprives prisoners of the bodily presence of others, forcing them to rely on the isolated resources of their own subjectivity, with the (perhaps surprising) effect of eroding or undermining that subjectivity. The very possibility of being broken in this way suggests that we are not simply atomistic individuals but rather hinged subjects who can become unhinged when the

> concrete experience of other embodied subjects is denied for too long. (pp.xi-xxx).

While discrimination, slavery and addiction all limit our identities and our autonomy, solitary confinement removes it completely. This makes sense if our identities are created and maintained through our web of semiotic domains, and our autonomy is that process by which we navigate these domains and the domains outside of our network. Removing ourselves from our web of domains, cutting off all of our relations, cuts off the self as well or, at least, cuts off the possibility of a future self.

Autonomous Habilitation

According to Anthamatten (2012), our autonomy is that which allows us to "have a hold of" (p.33) the world. If the individual is socially constructed by their domains, their habitat, then the only way the autonomous individual can reconstruct their domains is through their habits. Anthamatten draws on the Deweyan notion of habit and habitat to describe the reciprocal way in which individuals construct and are constructed by their communities. He calls this process habilitation.

> The mind is a hand, the hand is a mind. The encounter with the world is never passive or unidirectional … Mind is prehensile, an embodied activity that reaches into the world and shapes what it knows just as much as it is shaped by what it is knowing. (p.28)

Our habits, for Dewey, are how we approach our habitat, how and where we place value, how and what we see. We see with our hands, with our whole body, not just with our eyes. The point Dewey makes and Anthamatten draws out further is that when we think, we think with our body as well as with our minds. When we act, we act with our minds just as much as our bodies. As Anthamatten shows, habilitation occurs physically and mentally. Of course our habits are also constructed by our web of domains; our habitat constructs our habits.

> Twigs become nests, trees become huts, the hidden secrets of rocks become jewels or fuel, floods become irrigation, illnesses become motivations to medicine, customs and laws become society, politics, art. The organism is always caught up at the nexus of these vectors of freedom and dependency, passivity and objectivity, the point where habits and habitat touch. (p.33)

Habilitation is both physical and mental. It is “the process of making one 'able' to make these connections that facilitate growth, of cultivating ethical 'habits', of helping the student to come to have a 'hold of' her world as well as to recognise the ways in which the world has 'a hold' on her” (p.32). Anathamatten distinguishes between three aspects of our habitat; the natural, the genetic, and the social. The natural is the external world we live in and the genetic accounts for our physical abilities and weaknesses. He calls these the habitats of physis; the physical attributes and restrictions of our habitat. Our social habitat is our social environment; our relations to our family, friends, and greater communities. Our habitat comprises these three elements, but they do not act upon us separately. Anathamatten only distinguishes between them to show that the world has a hold of us both physically and non-physically. Our habits, too, are both physical and social. They are formed by our habitat, as a response to it, in order to engage with it. However, in order to have 'a hold' of our habitat, we must first know it. Habits that are formed by processes we aren't aware of run the risk of being oppressive. We may know of our habits, but not why we have them. Identifying how the world has a hold of us gives us knowledge of our self; we understand why we are the way we are.

It is not simply that intersectional autonomy exists within a social setting, it is that autonomy is socially constructed and taught; the individual is constructed from various intersections of domains of value and belief. Habit constructs habitat just as habitat constructs habit. When we reach out into the world we change it and the world changes us. It is intimately embedded within the process of socialisation, which is why oppressive forms of socialisation are so harmful; they restrict our autonomy and help to create a world that will restrict the autonomy of others. An oppressive socialising force, an oppressive habitat, is an oppressive semiotic domain. It is a domain that restricts our habitat, one that limits our connection to other domains of knowledge; that rules out other domains of knowledge as unimportant. Being able to identify our habitats and the habits that are formed by and form them helps us to evaluate which forms of socialisation, or which semiotic domains, are oppressive. An understanding of habilitation is a necessary condition for autonomy. The autonomous self is one that can move across a range of semiotic domains that can identify with different habitats. The autonomous self, then, is entirely constituted by the various relations that it can move between, and so cannot be anything but relational and intersectional.

The Body / Mind Dualism Reconfigured

The traditional Cartesian view of the individual struggles with habilitation. This is because, for Descartes, the body and the mind are separate entities that are connected causally. The body can affect the mind and the mind can affect the body, however, there is a causal story there that Descartes, and others since then, have had difficulty fully explaining. If mind and body are separate, how are they connected? If this connection is a causal one, which one is the individual, body or mind? Whatever is causally antecedent must cause the other, and the general assumption is that whatever 'I' am, I must be the thing that causes me to act. With classic dualisms like this, it is common to suppose the mind is antecedent; the mind controls the body, and that, therefore, the 'I' that we speak of is the mind. After all, it is the mind that is the thinking thing, and thinking is, at least initially, our only certainty.

The mind/body dualism is problematic, at least in terms of learning. The dualistic division between mind and body, which can be traced back to theories of knowledge in Ancient Greece and epitomised in Descartes *cogito* (Lloyd 1984; Plumwood 1993), and whose legacies bear on conceptual complexities in current debates in philosophy, philosophy of education and educational theory, has repercussions for teaching and learning and classroom practice. We are left with learning environments that cut off the learner from the world which manifests its character ideals associated with other dualisms, such as culture/nature and reason/emotion. Dewey (1896) says, when describing a well-known thought experiment of a child reaching for a candle: “The ordinary interpretation would say the sensation of light is a stimulus to the grasping response, the burn resulting is a stimulus to withdraw the hand as response and so on” (p.358). The 'ordinary' interpretation separates the bodily sensations from the mental actions and reactions in a very clinical way. The light is a sensation that stimulates a grasping, the sensation of burning is a stimulus that causes the hand to be moved; this is a mechanistic way of viewing human movement. There seems to be something lost in this separation. Dewey goes on to argue that we cannot isolate sensation and response like this; the lesson about fire only holds if sensation, stimulation, and response are all part of one movement. It is, he says, “no longer mere seeing; it is seeing-of-a-light-that-means-pain-when-contact-occurs” (p.360). The action of a child reaching out to a candle and burning her hand is a full circuit of experience for Dewey. To separate out this circuit into bodily functions, mental reactions, and resulting stimulus is to miss a greater understanding of the experience *as* experience. This idea permeates Dewey's later discussions on education and citizenship because this is the basis of experience-creation and self-learning.

Anathamatten's (2012) development of this notion, and other arguments made by Dewey, lead to the idea of habilitation discussed above. By saying “the mind is a hand, and the hand is a mind” (p.26) Anathamatten is describing how we act in the world. It is not the case that the mind controls the hand, or the hand controls the mind, it is that the mind and the hand act in unison. There is no causal relationship between body and mind in the pragmatist framework of experience, contrary to what I just described is problematic for Rationalists and Empiricists; Dewey's claim is simply that experience is the locus of thought and feeling. However, it is important to know that this is not some mere collapsing of one into the other. Like so many other dualisms discussed in this thesis, this conception of the self does not seek to collapse body and mind into one another, but to show their reciprocity (Bleazby 2013).

What does this mean for habilitation? Having a conception of the self that necessarily encompasses both the physical and the mental means that in order to engage with an individual both attributes need to be accounted for. Processes such as learning will need to encompass and engage with both worlds. What is the physical component of the maths or English classroom? How about the mental world of swimming or soccer? What, if anything, does jumping have to do the learning process? These are just some of the questions that need to be addressed when constructing an environment like a classroom.

The playful attitude is an ontological opening which gives us access to semiotic domains, and our autonomy designates our movement within and between these domains. The intersectional self is one formulation of autonomy that can account for this level of turbulence within the individual self. The self is no longer an object; it is now a process, as Levine-Rasky (2011) says. In this chapter I have built upon the idea that the playful attitude helps to shape this kind of self. I will now turn to where and how we can integrate the playful attitude in schools, and into our idea of education more generally.

Chapter 6

Fun is Not the Goal: Play in the Classroom

It is often the case that in the course of our everyday routines that the most important questions are often overlooked or ignored. Why do we need to learn all these subjects? Why does education matter? What is the point of school? These questions can easily be brushed aside by parents, teachers, curriculum designers, and government policy-makers as little more than the recalcitrant moans of students. It is a mistaken view that these questions are relevant only to philosophers of education, educational theorists and educators. These fundamental questions are at the heart of what we, as a society, should be questioning. These questions can guide us in the construction of successful modes of education. Answering why we learn will give us a head start into answering the question of how we learn.

One answer to why we learn was provided by Dewey (2005) in his now seminal work, *Democracy and Education.* Society, he says, "not only continues to exist *by* transmission, *by* communication, but it may fairly be said to exist *in* transmission, *in* communication" (p.5). For Dewey, education is a community and society building exercise designed to bring new members into the fold and to facilitate a healthy level of change and development to a social group in order to avoid stagnation. Dewey was primarily concerned with the individual's place in the world, *before* any notion of career path or profession. The purpose of schooling is not about achieving success, but about the creation, integration, and reconstruction of society as a constant process. Given the social nature of the self that Dewey propounds, it would be reasonable to say that the act of learning is an act of growth, both for the individual and the society the individual finds themselves in. In other words, learning is a fundamental part of human social life. But does this answer our ever irritating 'why' question?

The playful attitude resonates with Dewey's ideals of community and education. Like Dewey's theory on education, the principles of the playful attitude aim to construct individuals that produce communities, and communities that produce individuals. Habit and habitat, as always, are reciprocal spheres of influence. Formal education provides, or ought to provide, effective habitats that allow for and draw out habits in individuals that are capable of integrating into established domains of knowledge and social understanding, but are also capable of reforming those domains to hold new or different kinds of knowledge and understanding; what Dewey call reconstruction. These domains of knowledge, these semiotic domains, make up our entire social landscape, and are the foundation of our world; they provide the context for how we see the world, how we understand and

communicate, and how we come to *know* anything (in as far as we can know anything). Increasingly, however, our formal institutions are not providing effective habitats that link individuals to communities, habitats to habits, content to context, and information to knowledge. As students, we have been cut off from our domains of knowledge, influence, and action. Anathamatten (2012) echoes this idea. It is, he says, "a cruel paradox that the first moments of education are often the moments whereby learning and genuine experience become impossible" (p.28). Schools rip students out of the physical and social world and feed them information that is disconnected from its context and community. What do we learn in this vacuum? We learn raw pieces of information that are not connected to anything useful. However, we can recall a great deal of these pieces in order to answer questions. This gives us the illusion of knowledge, but really only provides the skills necessary to win a game show or fill the job vacancies so that individuals contribute to the economy of the current neo-liberal model of politics. The banking conception of education seeps into classrooms, curriculum and education policy, often undetected through the hidden curriculum or explicitly as a teaching method. In this chapter I will explore what the playful attitude can do to reconnect schools, parents, teachers, and most importantly students, back to the idea of learning and education. In order to do this, I propose we not only teach using the playful attitude as our guide, but we *teach the playful attitude*.

I will not be constructing an entirely new kind of system of schooling, nor will I be proposing a fundamental reshaping of schooling as we know it. Like in all things, we are not starting in a vacuum. The context I am writing in is contemporary Australia in the year 2016. The educational institutes of today are operating under the Australian Curriculum with the view to providing the same level and quality of education across the country. The national curriculum is not inherently a bad foundation for education, and the focus on "supporting all young Australians to become successful learners, confident and creative individuals, and active and informed citizens" (Australian Curriculum 2015), prima facie, is a worthwhile goal. This is in line with the discussion in Chapter 3 where I describe the student as a life-long learner. Teachers need to comply with a set of nationally recognised standards that will ensure a particular kind of growth in the community. In this model students are educated toward a model of independent and mature adults who and certain about themselves and their place in the world. This approach will find success in a portion of the wider Australian community, namely those concerned with economic success, technological advancement (profitable technological advancement), and conforming to an historical national identity. However, this approach does not escape from one of Dewey's primary concerns about training as opposed to educative teaching. The war-like tribe, for Dewey, cannot help but bring up their young to be war-like, because that is what they value. When we are governed by a political

system that adheres to a set of values touted as commonly shared values it becomes the dominant social and political narrative to which members of the community have access. The National curriculum is designed to produce creative, technologically savvy, capable adults who know their place in the world (Australian Curriculum Assessment and Reporting Authority 2015); but all from the perspective of economic growth and success. This model still fits Freire's description of receptacles to be filled, but in this case with the necessary skills, knowledge, values, and capabilities to be effective Australian citizens in a global economy. This model can be described as education for democracy, which serves

> political leaders in modern democratic societies, who have a vested interest in promoting the essentially pre-political conception of citizenship, a means for enabling individuals, organisations, and nations to meet the challenges of an increasingly competitive world to the neglect of involving people in a continuing process of education aimed as self-actualisation and a learning society. (Burgh 2003, p.109)

For Dewey, communities are the locus of learning in which students reconstruct knowledge so that the classroom represents democracy in action, i.e., democracy as an associated form of life (Burgh 2009, 2010; Kennedy 1995). Unlike current education system in Australia (and elsewhere in Western liberal democracies) which is best described as education for democracy, Dewey's idea of education can be characterised as democratic education.

> Whereas education for democracy focuses on the acquisition of knowledge and skills as a means to improve the capacity of future citizens to exercise competent autonomy, democratic education recognises the social role of schooling as that of reconstruction and that children and young people have an integral role to play in shaping democracy. (Burgh 2014, p.31)

For reconstruction of knowledge and experiences to occur in the classroom, both the teacher and the students must have a "childlike way of being in the world" of education encounters (Kohan 2011, p.349), which allows for imaginative philosophical play with ideas (Stanley 2012; Haynes & Murris 2013). Teachers who see their role as facilitators and co-inquirers rather than imparters of information (Splitter & Sharp 1995), are likely to be influenced by students to be "more open to put themselves freely into question" (Kohan 2011, p.349). This, in turn, provides students with further opportunity for imaginative philosophical play with ideas, and, thus, to be engaged and involved in

shaping democracy; they learn what it means for them to live an associated form of life though communal inquiry as an educational experience (Burgh 2009, 2010). For Dewey, reconstruction occurs through inquiry, a process of habilitation (Anathamatten 2012). It is for this reason that the playful attitude ought to provide the foundation for pedagogy, as a way of exploring the notions of community, knowledge, and purpose.

The first part of this chapter will look at the current state of research in the area of games in education. Typically any talk of play, games, and education will come in three distinct forms: gamification, gameful design and educational games (sometimes known as serious games). I will give a brief overview of these forms, and show why they are inadequate for our purposes. The playful attitude, as a mode of education, gives students and teachers access to something deeper than which gamification, gameful design, and educational games are capable. The second part of this chapter will look at two ways in which the playful attitude can be brought into the classroom. The first and simple way is to use video games as literary texts; the second and more complex way explores the use of the playful attitude as a guiding ideology for the construction of pedagogy. A closer look at the playful attitude will show what kind of a classroom might be constructed, and what some of the difficulties will be in this. Finally, the third part of this chapter will consider another educational possibility that is similar to this one, the Montessori model of education. However, my analysis will show some significant differences between the Montessori method and the kind of play-based pedagogy that I outline in this chapter, and go into more detail in the next chapter.

Forcing Fun

Gamification entails the use of game characteristics (usually video games) and applying them to other, non-game related, activities. This is becoming popular in the workplace, in schools, and in the home. Typical of gamification is the use of achievements for certain activities, leaderboards for work progress, and competitions among co-workers. One of the common examples of gamification is the use of badges. Badges are symbolic rewards for completing a task. In video games they are often used to signify progress in a game. Badges aren't worth anything, and usually don't have any impact in the game itself, however, they do provide some level of prestige among gamers; the rarer the badge you have obtained the more skilled you appear. This is a popular model for many businesses to adopt. You might earn a time trial badge for completing a work task faster than others, or a work ethic badge for not taking any sick days in a month. The basic idea of gamification is to take pieces of popular games and apply them to tasks that are ordinarily considered boring or not

engaging. Its aim is to 'make work fun'. If anyone else is cringing at this point, you are not alone. I am reminded of a quote from Irvine Welsh's film *Trainspotting.*

> Choose Life. Choose a job. Choose a career. Choose a family. Choose a fucking big television, choose washing machines, cars, compact disc players and electrical tin openers. Choose good health, low cholesterol, and dental insurance. Choose fixed interest mortgage repayments. Choose a starter home. Choose your friends. Choose leisurewear and matching luggage. Choose a three-piece suit on hire purchase in a range of fucking fabrics. Choose DIY and wondering who the fuck you are on Sunday morning. Choose sitting on that couch watching mind-numbing, spirit-crushing game shows, stuffing fucking junk food into your mouth. Choose rotting away at the end of it all, pissing your last in a miserable home, nothing more than an embarrassment to the selfish, fucked up brats you spawned to replace yourselves. Choose your future. Choose life … But why would I want to do a thing like that? I chose not to choose life. I chose something else. And the reasons? There are no reasons. Who needs reasons when you've got heroin? (Boyle, McGregor, Bremner, Miller, McKidd, & Welsh (1997))

The principle of gamification begins with a dim view of reality. By using aspects of video games in real life, gamification can make the world a more interesting, interactive, *fun* place. Is there an analogy between gamification and heroin? The motivations of both appear to be uncomfortably similar. The above quote from Irvine Welsh attempts to explain the worldview of the heroin addict. Welsh asks us to consider the life of the addict as a reasonable and legitimate response to the ills of contemporary society. Reality is somehow broken, but here is something that can change things. It is a Siren's call, trying to convince us that the world can be beautiful. The most dangerous part of this message is the implicit assumption that reality as it stands is somehow *not* beautiful, or not yet beautiful. Gamification tries to *fix* unpopular activities by making them resemble a game. However, games aren't their achievement badges and the point of a game is not to get the high score. Games cannot *fix* the real world, they can only highlight and magnify the good (and bad) parts. Taking these elements from games and expecting them to have the same effect on other activities shows a fundamental misunderstanding about what a game is. These are modes of feedback, not modes of motivation. Elements of games cannot be used to trick workers into doing unpopular tasks, and if they are used in this way, they cease to be games, because they lose their status as voluntary activities.

In response to the gamification movement, Jane McGonigal (2011) proposes an alternative to the pitfalls of gamification. She starts her book *Reality is Broken* with the idea that "[g]amers have had enough of reality" (p.2). Gamers are opting out of reality, and they have chosen something else. Her solution is that we need to change reality to better function like a game, to make everything *gameful.* Gameful design attempts to offer a more complex understanding of games and their effect on the world. Instead of taking elements of games and applying them to the real world (what gamification does), McGonigal wants to redesign the world like a game. She insists gameful design is a step beyond gamification, and it does offer a more compelling argument. An example of gameful design can be found in the Quest to Learn school. Quest to Learn is a school that is built entirely like a video game.

> In many ways the college-preparatory curriculum is like any other school's – the students learn math, science, geography, English, history, foreign languages, computers, and arts in different blocks throughout the day. But it's how they learn that's different: students are engaged in gameful activities from the moment they wake up in the morning to the moment they finish up their final homework assignment at night. (p.129)

Learning is called questing, grades are replaced by levels, and exams are boss levels. Students have a public profile that lists all their learning superpowers. These profiles are used by other students to recruit members for their group assignments, called group quests. Guest speakers come to the school often. They are called secret allies, and give out missions for those students who want to participate. Finally, part of their homework is to interact with a computer program called a teachable agent; it is a program that is designed to know less than the student. If the student can teach the lesson for the day, they have passed what is the equivalent of a quiz.

There are a lot of interesting features in the Quest to Learn model. Of particular interest is the grading system. Failure in this system does not mean permanent failure. Classes are set up so that students can try to pass 'quests' multiple times until they succeed. This system measures success, not failure. In much like a game, it doesn't matter how often a player fails, one instance of success equals success overall. There is also a sense in which students pursue goals in their own time, often progressing further in things at which they are good or are passionate about. It is a method of learning that is supported by much of what has been discussed in Chapter 4, particularly Gee's (2007) principles of learning (pp.221-227). As discussed in Chapter 2 Gee's principles of learning highlight collaborative learning, iterative success, and self-knowledge as important. The grading

system in particular is an example of the kind of positive engagement in learning for which games are so effective. However, for all its success there is something unsettling about this model. The Quest to Learn model is not just coercive, it is misleading. It does not just initiate new members into its value system, it does so by concealing other systems of value. I shall expand on this now.

Gameful design practices implement several important principles found in games; principles which support and encourage learning. For example, gameful design is interested in getting students properly engaged. McGonigal (2011) says:

> To participate wholeheartedly in something means to be *self-motivated* and *self-directed, intensely interested* and *genuinely enthusiastic.* If we're forced to do something, or if we do it halfheartedly, we're not really participating. If we don't care how it all turns out, we're not really participating. If we're passively waiting it out, we're not really participating. (p.124)

Despite this motivation, gameful design falls into the same traps as gamification. Gameful design still follows the principle that we need to trick or convince students that what they are doing is important, interesting, and *fun*. Reality has some fundamental flaw that requires a series of fixes, and games are the tools that we will use to repair our world. There is a common term used in objections to gamification and similar systems; chocolate covered broccoli. If there is something hard to swallow, like broccoli, we ought to cover it in something delicious and easy to swallow, like chocolate. Making learning like a game will hide the ugly, *yucky* work so that students just think they're having fun playing games. But, of course, it is easy to tell that there is broccoli under the chocolate. People, especially children and teenagers, aren't fooled by this. It is an insult to students, but it is also profoundly insulting to broccoli *and* chocolate. By combining the two, both are ruined. Learning games fall into this problem as well; they have their intrinsic motivation gutted, leaving a shell that resembles a game. Activities are no longer unnecessary, and they aren't (or aren't completely) voluntary; given this, it becomes more and more problematic that these activities are made more difficult for solely intrinsic reasons. Because of this, either the learning aspect of the activity becomes primary and the activity ceases to be a game, or the game aspect of the activity becomes primary and the activity becomes just a poorly designed game. More problematic, however, is the continued assumption that broccoli needs to be hidden in order to be palatable. So long as we treat education like this, no one will want to swallow it. This is profoundly frustrating, because a key aspect of games is that they are learning activities, and *that is why we love them*. Games, particularly video games, are activities that millions of people enjoy playing precisely

because they engage us in a learning activity. Why then are we still trying to hide these learning activities?

The greatest danger in gameful design is that this is an inauthentic mode of education; we are still only *training* students, as Dewey would say. When we train something, like a non-human animal, we use extrinsic rewards to get them to do a task they either have no interest in or don't want to do. In short, we use a carrot to lead the horse. However, when we *teach* in the Deweyan sense, we use intrinsic reward to show how the task has value to the student. Dewey (2005) says:

> We have to find, then, some differentia of training from education. A clew may be found in the fact that the horse does not really share in the social use to which his action is put. Some one else uses the horse to secure a result which is advantageous by making it advantageous to the horse to perform the act – he gets food, etc. But the horse, presumably, does not get any new interest. He remains interested in food, not in the service he is rendering. He is not a partner in a shared activity. Were he to become a copartner, he would, in engaging in the conjoint activity, have the same interest in its accomplishment which of others have. He would share their ideas and emotions. (p.11)

Unlike the trainer, the teacher Dewey describes, a co-inquirer engaged in conjoint classroom activity, aims to develop students' passion for a way of life and provide opportunities to develop their social and intellectual capacities and dispositions to achieve that. In gameful design, like gamification, the teacher does not approach students as co-inquirers. The students' interest is still mediated by a system designed to make some domain fun or more interesting. This ignores the initial interest a student might have in a domain.

The final sense that games currently mix with education are as educational games. These are games that have been designed for the sole purpose of teaching students. Be it multiplication, grammar, or scientific induction, educational games have embedded lessons similar to that of video games. Compared to gamification and gameful design educational games are a more authentic approach to incorporating games in an educational setting. There is no illusion here; these activities are overtly games that tackle specific subjects. In terms of pedagogy, educational games could be a valuable tool in presenting content in a different way. However, educational games have historically failed in a similar way to gamification; as I mentioned, they are just another form of chocolate covered

broccoli. When the primary purpose of a game is to take some content and teach it *in a fun way*, half the battle has already been lost.

In 'The Boom and Bust and Boom of Educational Games', Eric Klopfer and Scot Osterweil (2013) discuss the world of educational games, and highlight many of the strengths and weaknesses of such games. While they both work in the educational games industry, they provide some criticism of their industry and some hope as to its direction and future. On traditional educational games, Klopfer and Osterweil are critical, illustrated by the following quote: "If your spaceship requires you to answer a math problem before you can use your blasters, chances are you'll hate the game and the math" (p.295). Others make similar criticisms of this genre of game (see Callan, Bauer, Landers 2015; Bogost 2015). There is, however, a clear divide between what was once called *edutainment* and the modern educational games movement. Developers seem to be aware of and wish to avoid our chocolate covered broccoli problems. To this end, Klopfer and Osterweil seek an authentic balance between the fun of games and the function of learning.

> We believe there is tremendous power in blending forms, and are particularly interested in the ways in which games might follow the form of Entertainment titles but nevertheless offer intellectual challenges that contribute to academic accomplishment (much the way Macbeth, or Pride and Prejudice can be tools for fostering intellectual growth while remaining entertainment properties). (p.293)

This quote accurately captures both Klopfer and Osterweil's position in favour of educational games *and* my position against them. This is because titles like *Macbeth* or *Pride and Prejudice* were never written as educational books, even though they have proven themselves to be very instructive. Shakespeare is a good example of this. We study Shakespeare in schools, not because he was a revolutionary educator of his time, but because he was a revolutionary writer. At best, educational games can reach the status of text books, but they will never be a literary text that is worth studying. It is the difference between *Macbeth* and a textbook on *Macbeth*. Video games *are educational*, so to try and create an educational game is, I think, to miss the point.

Games as Texts

The principles of gamification, gameful design, and serious or educational games all fail to authentically engage students in learning. The reason for this is that these principles incorrectly categorise games as learning tools. The games are used solely for instrumental reasons, to fix the

boring or troubling or rough bits of education. Their ends become co-opted into the ends of a lesson or assignment. What is even more disconcerting is that these ends don't even lead to some intrinsic reward, but extrinsic badges or grades that have dubious value attached. This kind of learning is not focused on what is learnt, but on what is earned.

I offer two potential solutions to this problem. Firstly, I will re-categorise the video game as a text. There is still some worth to having games in the classroom. Much like other texts, we can engage with video games in order to explore concepts, worlds, and ideas. This works in much the same way educational games are attempting to do, however, instead of creating specially designed learning tools that aim to do something specific, the study of games as texts will look at commercial games that aren't built for the sole purpose of learning. This is akin to reading *Macbeth* instead of a book on *Macbeth*. Secondly, I will show that it is not that games have built-in magical educational qualities, but, rather, that good games force us into a certain attitude, the playful attitude, and it is this that allows for inquiry and exploration. How the playful attitude is implemented in the construction and running of the classroom, as well as how it is employed by teachers and students, will offer up a framework that succeeds where concepts like gamification and gameful design fail.

The term 'text' is a contentious one, and finding a definition which is sufficiently descriptive is difficult. It could be argued that that texts are cultural artefacts that contain context-sensitive information. Adrian Wilson (2012) provides further insight by deconstructing a related question initially posed by Foucault 'what is an author?' Through his discussion about the author Aristotle, Wilson develops his own account of Foucault's answer, arriving at the idea of the *virtual author*, saying:

> He is not the historical individual Aristotle, who (so we take it) wrote the words of the book we are reading (such as the *Politics*); rather, he is a virtual individual who is read in that text, who is constructed by the reader. The virtual author is a projection of the act of reading. (p.344)

The virtual author shares some striking similarities with Gee's conception of the virtual identity. Wilson describes four characteristics of the virtual author: (1) “the virtual author has the attributes of a person”, (2), “[o]ur own relation to the virtual author is a relation of *co-presence*”, (3) the virtual author “arises from the works, rather than the other way around; or to be more precise, the virtual author arises from our apprehension of the works”, and (4) “the integrity of the virtual author is textual, not biographical, in origin” (p.344). When playing a game, Gee describes the

player as temporarily taking on the virtual identity as a part of themselves. Sometimes this will be with identities that the player needs to *fill*, where the player can choose the attributes and qualities to play as a constructed virtual character. However, there are often times when players are asked to step into a virtual identity of a character that is already established. Gee (2007) describes this stepping in as a "delicious blend of my doing and not my doing" (p.49). When reading a text such as Aristotle's *Politics* we are asked to understand Aristotle's position. As philosophers, we are asked to take on Aristotle's position in order to formulate arguments *from his perspective*. Thus reading such a text, for Wilson, becomes a conversation with the author.

> It is precisely as if he were in the room with us, engaged in a conversation. In short, we are not dealing here with the historical person Aristotle, a long-dead individual who happened to leave certain writings which we may read and from which we might, with a struggle, infer something of his being. On the contrary, this 'Aristotle' is here with us, alive and well, in excellent condition, full of ideas, and talking to us: in a nutshell, he is a living person. (p.344)

For Wilson this conversation, this communication is how we understand and interact with texts: "The virtual author is *the text construed as a human agent* … The physical presence of the text becomes the existential presence of the virtual author, who as we have seen is the text-as-agent" (p.345). This way of formulating texts suggests they are almost living things; to read them is to bring them about. The interaction between reader and virtual author is where the text emerges. Thinking about the formulation of how players interact with games, discussed in Chapter 2, and a similarity between Gee's and Wilson's understanding becomes clear. Consider Wilson's reader as Gee's real-world identity, and the virtual author as the virtual identity. Given this, there is enough of a similarity between how we read 'texts' and how we play 'games' to say that games are texts, and that one way to occupy oneself with a text, then, is to engage with it playfully.

Given this understanding of games as texts, texts can be thought of as products of our complex communities, and, therefore, can be considered objects of Deweyan communication. Dewey (2005) argues for equivalence between communication and community, claiming that communication consists in the sharing of experiences with another. However, he argues that

> the experience has to be formulated in order to be communicated. To formulate requires getting outside of it, seeing it as another would see it, considering what

> points of contact it has with the life of another so that it may be got into such form that he can appreciate its meaning. (p.6)

Effective communication requires and creates a community, or semiotic domain, where context-relevant information can be expressed and exchanged. Texts are the result of one form of this kind of communication. As in all forms of communication, a level of interpretation is necessary to understand the text, and to understand where the text exists (within which semiotic domain). Interpreting texts, then, is a cultural exercise in understanding the semiotic domains of which we are a part. This provides one answer as to why we would want to study texts, in multiple forms, in schools.

Video games present us with a text that is both complex and generalised. Generally speaking, semiotic domains either allow complex communication that is only relevant and accessible within a very narrow scope or simplified generalised communication that is relevant and accessible within a wide scope (Dewey 2005). The more complex the communication, for example, the harder it is to communicate it to many people. Texts counter this somewhat by allowing the reader to interact with the virtual author in such a way that, when properly understood, such interaction can convey complex and deep communication to a broad audience (Wilson 2012). Texts, like books, images, music, movies, and games can convey highly complex experiences to a wide audience because of this kind of interaction. Video games in particular offer us rich texts that can communicate experiences. Video games combine a range of different characteristics from other kinds of texts in new and interesting ways. For example, music is often used to help set the mood of a physical space in a game. It is not just the words, or the images, or the sound, but everything together that is driving an experience. In order to better communicate what I mean here, I will look at two cases of video games that can be interpreted as texts: *The Stanley Parable* and *This War of Mine*.

The Stanley Parable: Experiencing the Absence of Autonomy and Freedom

The Stanley Parable starts with a simple thought experiment. The player finds themselves in a room with two doors. The disembodied voice of a narrator proclaims that Stanley, the protagonist and the character the player is controlling, 'walks through the door on the left'. The player is left with an interesting problem; do you follow the narrator's direction in order to progress the story, or do you contradict the narrator's direction and create your own story? Because of the nature of what a video game is capable of doing, choosing to walk through the door on the right and contradicting the narrator's direction creates an alternative story. The game is made up of these kinds of decisions.

There are many endings or end states in this game, however, each time the player reaches one of these end states the game restarts at the beginning. Sometimes the narrator remembers past play-throughs and other times the narrator is reset as well. Each storyline, therefore, is influenced by the choices the player makes, the choices the narrator directs the player to make, and which of the endings the player has achieved. The only way to fully explain this game is to experience it first-hand. I would like to direct the reader to go and play *The Stanley Parable* and come back once you have done this.

The Stanley Parable shows its ability to engage with a phenomenological issue like personal autonomy and freedom of choice. It becomes clear after playing for an hour or so that there is almost no choice that hasn't been programmed into the game to result in a different storyline. Does this make choice pointless or illusory? It is this kind of discussion that *The Stanley Parable* can facilitate. Video games can explore the experience of coming to question our ideas of free will and autonomy. In this way, the video game text acts as a motivator for further action and research.

This War of Mine: Whoa whoa whoa, what is it good for?

In keeping with the last case, I ask the reader to stop here and play *This War of Mine*. I ask this, not out of laziness or a lack of skill or insight into the game, but more to highlight the idea that video games present us with something that can only be *experienced*; to describe it to you is to lose something of the experience. As you may recall from Chapter 2, Lewis might ask us to *look along* the video game instead of merely *looking at*.

What sets *This War of Mine* apart from other games is its unusual approach to war. Traditionally, war games place the player in the role of the intrepid soldier; either the faceless nobody who wins the war against all odds or the super-hero-like war veteran who cannot be defeated. In *This War of Mine* the player plays as a group of civilians who are living in a war zone. The game is about survival, by any means necessary. The player starts the game in control of three characters who live in a bombed out building, scraping together food, clothing, furniture, and tools wherever they can. Players are not strong or well equipped. Unlike other games, the feeling of playing this game is one of helplessness. A player can choose to loot other buildings for food and equipment, but this sometimes means stealing from other people or defending yourself against attackers. It is a difficult game to play, not just because the game play is challenging (sometimes brutal) but because the player is forced to make decisions in scenarios where there is no good option, just worse options. In short, instead of experiencing the glory of war, the player experiences the costs, helplessness, and futility of war, all from an individual perspective.

We reach a related point, in terms of the analysis of war and its effects, for example by reading *All Quiet on the Western Front,* or watching *Jarhead*. These texts all deal with a related group of themes revolving around showing another side of war. The point of showing this equivalence is not to argue that video games can somehow replace all these other texts, but that they can be just as effective as a text as a book, or a movie, or any number of other texts can be. Video games present teachers, students, and parents with a different avenue to explore when talking about complex themes.

The Playful Classroom: it is Not what you Think

In the previous section I showed how video games, when understood as texts, can be used in a classroom. This is one approach as a response to both gamification and gameful design. There is value here but games as texts are not the focus of this dissertation and do not constitute my response to gamification. Gamification and gameful design hit upon something important about education, however, these theories misidentify it as originating in the game. Games are just highly specialised play activities that require the playful attitude instead of just encourage it. As I explicated in Chapter 2, play and games can be thought of as both activities and attitudes; the difference is, while play activities *encourage* the playful attitude in participants, game activities *require* it in participants. It is the necessary interaction of the playful attitude and the activity in this way that is the most important part of this whole experience. Therefore, it is the playful attitude that needs to be drawn out and situated for the purposes of education.

How this approach to education is implemented will decide its success or failure. To merely gut a game and overlay classroom activities with 'playful' ones would not work; we are left with our chocolate covered broccoli. Students can 'smell' it when teachers try to make learning fun (Klopfer & Osterweil 2013); when they are being *trained* and not *taught*. As an example worth studying, how do video games overcome this problem of authenticity? Video games succeed because of the voluntary and unnecessary nature of the activity; there is always the choice to stop playing. This appears to be something insurmountable for schools; how can something that we require of all members of the community be voluntary? In response to this, I draw on Dewey (2005) who says:

> While the customs and rules of adults furnish stimuli which direct as well as evoke the activities of the young, the young, after all, participate in the direction which their actions take. *In the strict sense, nothing can be forced upon them or*

> *into them*. To overlook this fact means to distort and pervert human nature. To take into account the contribution made by the existing instincts and habits of those directed is to direct them economically and wisely. Speaking accurately, all direction is but *re*-direction; it shifts the activities already going on into another channel. Unless one is cognizant of the energies which are already in operation, one's attempts at direction will almost surely go amiss. (p.18, italics added)

I have discussed Dewey's conception of habit and habitat in some detail already; this is due to its foundational nature in terms of an individuals' construction. This passage highlights a danger many educational theories fail to recognise. Firstly, habit and habitat are reciprocal, not causal. While any environment is coercive, including the classroom, there will always be the element of individual habit that exerts some control. The individual is never fully dominated; there is always some subversion that is possible. This requires knowledge of the environment, knowledge of the self, and knowledge of individual goals and direction; in short, autonomy (see Chapter 5). Secondly, and perhaps more importantly, Dewey gives us a better understanding of what it is for an activity to be unnecessary, and what it means to voluntarily engage in said activity. It is taken for granted that there is one community for our students to gain entry into and, it is assumed that the classroom is the only way into this community. It is certainly the case that in order to gain entry into some community or other the individual must first pass through the community's initiation, like passing a class, but that does not mean this is involuntary, and it by no means makes this necessary; merely necessary for something.

> A modern society is many societies more or less loosely connected. Each household with its immediate extension of friends makes a society; the village or street group of playmates is a community; each business group, each club, is another. Passing beyond these more intimate groups, there is in a country like our own a variety of races, religious affiliations, economic divisions. Inside the modern city, in spite of its nominal political unity, there are probably more communities, more differing customs, traditions, aspirations, and forms of government or control, than existed in an entire continent at an earlier epoch. (p.15)

The first characteristic of the classroom constructed by the playful attitude is voluntary participation; understanding the relation between habit and habitat, what it means to choose a community, and what it means to exert autonomy. If, as Dewey claims, we are constructed by our

communities, choosing which communities we are a part of is one of the most influential things we can do; it is an act of autonomy. How this plays out practically is easier than it might seem at first. In high schools in Australia, this is already done to some extent. In addition to compulsory subjects, students are given a choice of subjects they take from a list of non-compulsory subjects, usually from Grade 9 onwards. What is missing is an understanding of this choice. We do not teach toward the attainment of knowledge, or even to an ideal position in the community, but to a particular format that produces outcomes that are assessable. The decision to choose one subject over another is frequently framed by the perceived importance of each subject, not by the student's aptitude or interest. Teaching students to see they have a choice in which community they live, and what membership of certain communities get them, will help to support the idea that their choices are their own. This is not an empty choice; it has a direct effect on the student. There is, of course, the possibility that the student will pick a community that is outside of the school community. High school students in particular may be drawn away from a constructive community to one that is destructive. However, it is important, not just for students but also for teachers and parents, to be able to identify a community that is destructive, or one that limits the individual's connection to other communities, and one that is just vastly different from other domains. A destructive domain, for example, is one that limits the individual's autonomy (see Chapter 5).

Schools sometimes have a fairly closed and insulated habitat. This characteristic highlights two important points about teaching in this way. Firstly, the student has some control of which domain they join, and secondly, students will find connections to domains that teachers, parents, and administrators will not immediately see or understand. With this in mind, one function of the school is to facilitate student's learning so that they can think for themselves with regard to destructive domains, but also how to forge new connections with seemingly disparate domains and how to communicate these connections.

The second characteristic of the playful classroom is an understanding of the classroom as an instance of a semiotic domain. The role of the teacher in the beginning phase of a class should be to open up a domain, allowing the students to temporarily engage with it on its own terms. This requires the students to assume an identity as a member of this domain and it requires the teacher to already be a member of this domain. The science classroom, for example, requires the students to attempt to *become* scientists, if only temporarily. The method of scientific inquiry is open to them and the teacher can lead them through the process of engaging in the domain of science. This is where the playful attitude is necessary; students are asked to hold certain beliefs *just so* a specific activity can occur. Where gamification or gameful learning would coat this step in chocolate, this

playful classroom has authenticity as its guiding force. The teacher, as a member of the domain into which he or she is inviting the students, shows what the value of this domain is; in this example, of the value of scientific inquiry as a way of understanding the world. Of particular interest to the individual student is the question 'why should *I* learn this?', or possibly 'do I see the value of this way of understanding the world?'

There is a particular side effect to this characteristic that needs to be addressed directly. Not everyone will be convinced that every subject is worthwhile. Some people, for example, don't like science as a curriculum subject, and this should be acceptable. After all, not everyone will become members of the scientific community. However, students don't have to decide to become members of the domain of science through studying science as they can engage in scientific inquiry. The power of the playful attitude is that it allows students to hold a position, or belief, or idea, without having to accept it. This is one part of teaching autonomy, if autonomy is the movement or possibility of movement within and through semiotic domains (see Chapter 5). For those who do want to become members of the domain, this is the first step towards being a member of this community. For those who do not want to become members of the domain, the identity that they create to temporarily move through this domain becomes their method of interaction with members. The science classroom, for example, gives people who want to be scientists their first initiation, and it gives those who do not want to be scientists a way for them to still communicate, in a Deweyan sense, with members of the scientist's domain engaging in scientific inquiry.

The third characteristic of the playful classroom moves beyond the specific classroom in which the students find themselves. Any student who has temporarily moved through a domain to which they do not want to be a member will recognise that the social landscape is made up of a network of domains. This characteristic holds that any classroom that gives students access to a domain needs to also explore where that domain is situated in the social landscape, to what other domains it is connected, and how. The idea that there are many domains that share varying degrees of similarity and difference is important for student learning; only then can they begin to move between domains and understand their movements. For example, where psychology might be placed can indicate what value is being attributed to it; within or on the outskirts of science will show a heavy influence in analytic psychology, where as a connection to philosophy, sociology, cultural studies, or even art shows an understanding of psychology that moves beyond statistics. An understanding that psychology is connected to all of these areas gives the student a better perspective on the power of psychology and its effect on other domains.

The fourth characteristic of the playful classroom is the facilitation of the movement from student to teacher. Membership in a domain reveals more than just situated information; it reveals a new aspect of the self. When students are exploring a domain with a playful attitude, it is a temporary activity; when the class ends the domain closes again and the temporary identity the student dons to enter is discarded. However, if a student comes back to this domain repeatedly, their domain-specific identity becomes more a part of their network of selves, the ideologies of the domain become a part of their network of ideologies; they become a member of the domain. As members of a domain, students are now able to contribute to knowledge, belief, and context. They are also able to change things. Only a scientist, for example, can publish a scientific theory that successfully refutes Einstein's theory of relativity. Only a gamer can give a critique of a video game that other gamers will value as useful. This puts the student in an interesting position. A fully fledged member of a domain is able to promote their domain, their actions now represent that domain, and given enough time they are able to start teaching in that domain. Members of a domain can also do something extraordinary; they are capable of contributing and changing the knowledge, ideals, and beliefs of that domain. Semiotic domains are made up of members, and it is these members that create and maintain the situated knowledge of that domain by teaching, publishing, acting, embodying, and upholding the principles of that domain; students gain this ability when they become a part of a domain. A proper understanding of this process will aid greatly in the interactions between students as teachers. This is because teachers are now seen as students who are senior members of the domain, and students become apprentices to that domain.

The final main characteristic of the playful classroom aims to show how someone can be a member of many domains. If membership to one domain adds a facet to our developing *self*, membership in many domains develops complexity in the individual. The frequent use of the playful attitude to engage in many domains leaves the self multiplied, fractured, and sometimes in contradiction. The purpose of this final characteristic is to show that individuals *are* multiplied, fractured, and sometimes in contradiction. How we put together our network of domains, how we order our ideological preferences, and how we change these structures depending on the environment in which we find ourselves, gives us a dynamic, ever shifting and moving *image* of the self. While this is true of children and teenagers because they are still figuring out 'who they are', it is equally accurate for adults.

Montessori: The Loss of Frivolity

The above characteristics are a vague collection of driving ideologies that can be implemented in a number of different ways. This vagueness is part of the theory's strength, because schools need to be able to account for wildly differing classrooms. The country, school, age group, teachers, and individual students all contribute to the overall habilitation of the space, and so each classroom will have variations. Unfortunately, it is not entirely clear how these characteristics would be implemented, and what outcomes would be the result. In response to this lack of examples of implementation, a model of education, or more accurately, a teaching method, that shares many similarities with this theory can be found in the Montessori educational approach, often referred to as the Montessori Method. How close the Montessori Method matches the above theory, and what problems arise from it, I will now explore. I do this to demonstrate that, while the Montessori Method is often associated with play-based learning, it is not playful in the sense I have discussed. Specifically, it does not encourage the playful attitude.

Dr Maria Montessori, an Italian physician and educator, developed an educational approach that entirely opposed what she saw as the 'traditional school'. Over the course of her life, her research based on studies with ‘special needs’ children are characterised by an emphasis on independence, freedom within limits, and respect for children’s natural psychological, physical, and social development (Montessori 1966, 1971, 1994; Standing 1957; Kramer 1976). She highlighted two distinct and dangerous assumptions of the traditional school system; the school as a factory, and the student as an empty vessel (tantamount to Freire's banking conception of education). The idea that schools should not be run as factories which *produce* educated adults, and that students are not empty vessels that simply need to be *filled* with knowledge served as fundamental guiding ideals. From these ideals Montessori started her research project, the result of which became the eight principles of Montessori education. Angeline Stoll Lillard (2005), an advocate of the Montessori school describes in her book, *Montessori: The science Behind the Genius*, “eight insights Dr. Montessori derived through her observations of children that undergird her approach to schooling” (p.29). She lists the eight principles as:

1. Movement and cognition are closely entwined, and movement can enhance thinking and learning,
2. That learning and well-being are improved when people have a sense of control over their lives,
3. That people learn better when they are interested in what they are learning,

4. That tying extrinsic rewards to an activity, like money for reading or high grades for tests, negatively impacts motivation to engage in that activity when the reward is withdrawn,
5. That collaborative arrangements can be very conducive to learning,
6. That learning situated in meaningful contexts is often deeper and richer than learning in abstract contexts,
7. That particular forms of adult interaction are associated with more optimal child outcomes, and
8. That order in the environment is beneficial to children. (p.29)

There are clear similarities between Montessori's principles and what has been discussed in this thesis so far. The idea that movement and cognition is connected, the importance of voluntary participation, interest in student interest, an aversion to extrinsic reward, an understanding of the need for knowledge to be situated; these are all important points on which the playful classroom aligns with the Montessori method. Montessori is often associated with a play-based curriculum (Lillard 2013), which raises the question 'to what extent is the Montessori method an example of the playful attitude being employed in the classroom?'

There are, in fact, some striking differences between the playful attitude and Montessori's educational approach. I will discuss these differences to show that the Montessori Method places unnecessary restrictions on the activities of children and how the play attitude can alleviate these restrictions while still producing the kind learning outcomes Montessori valued. Despite views to the contrary, at its heart the Montessori Method advocated by Montessori schools today is an outcomes-based model which seeks to *train* a certain kind of individual, one that is superior in efficiency and productivity to students from different school systems. While Montessori is staunchly opposed to extrinsic reward in the form of competitive grading, there is nevertheless a specific aim or function to each and every activity; some external reason for engaging in the activity. Any educational system is going to have a difficult time functioning without such external reasons, so this is not a problem just for Montessori, but for all systems that seek to employ playfulness in some way. However, the difference with the Montessori Method practiced today is that these external reasons serve as the primary reason (and in many cases the only reason) for doing tasks. The playful attitude can account for extrinsic motivation and reward by mitigating it with intrinsic motivation and reward, but Montessori schools tie all their activities with their function so well and so tightly, the extrinsic reason for participating in an activity becomes the only reason. On the topic of free choice, Lillard (2013) says “if children choose to engage in some way

other than expected, the adult follows the children's lead and tries imperceptibly to return the youngsters to the learning agenda" (p. 165). This sounds relatively innocuous; after all it is the teachers' job to keep students on task. However, the level of directing in the Montessori Method belies a narrower focus to the curriculum that can be taught. A good example of this problem can be found in the blocks.

All the materials in a Montessori classroom, as stipulated by both Maria Montessori and the organisation she started, the Association Montessori Internationale (AMI), have been designed for a specific lesson. An example of this is the three sets of blocks known as the Pink Tower, the Brown Stair, and the Red Rods. Lillard explains:

> Like most Montessori materials, these blocks are both intrinsically logical and relate to other materials in the primary classroom. For example, each set consists of ten blocks, echoing the decimal system, and they vary in size systematically. Pink Tower blocks vary in three dimensions from a 1cm cube to a 10cm cube, increasing by 1cm in each side in each successive block. Blocks of the Brown Stair are all 20cm long, but vary systematically from 1 cm in width and height to 10cm. Red Rods are all 2.5cm in height and width, but vary from 10cm to 100cm (1 meter) in length. (p.169)

Lillard describes the reasoning for these blocks, how each shows variation in dimensions; the Pink Tower shows variation in three dimensions, the Brown Stair shows it in two dimensions, and the Red Rods show it in one dimension. On the face of it, this appears to be a fine way to introduce pre-school children to different shapes and how they vary across the dimensional axis. What is troubling, however, is this:

> In Montessori schools, children cannot choose to play with materials teachers have not yet shown them how to use. Before children can take materials from the shelves, they receive a lesson on how to use the materials in a way that is believed to extract the intended benefits from the items … More generally, in a Montessori classroom, children cannot choose to engage in unconstructive activities. A teacher must decide whether activities are constructive and stop those that are not, and they usually consider using materials for purposes other than intended to be unconstructive. In other words, children can't take the Brown Stair blocks and build a house with them. (pp.169-170)

The specially designed Montessori materials all have a specific function and cannot be used, by teachers or by students, for any other function. Some materials have multiple functions. For example, the Red Rods are not just aids in dimensional variation, but they are also mathematical tools. The Red & Blue Rods, which represent the next material in this sequence, are designed to teach children how to count by using Red Rods that have blue sections added every 10cm along the rod. In this way the Rods allow the children to move from one lesson to the next. What they cannot do, however, is use those rods in any way that does not constitute the intended purpose. The rods cannot, for example, become pillars in a palace, or train tracks, or rolling pins, or trees, or anything else. Keep in mind, this is a pre-school classroom. The children in this space are learning, not just dimensional variations, but about the value and use of objects. The Montessori Method teaches children that each object has a specific use and cannot be used for anything else. There are many reasons why this is problematic. However, I will outline the two most pressing to this thesis: firstly, this method of teaching promotes training not learning, and secondly, there is a distinct lack of educational value on the role of doubt and inquiry in the learning process.

For Dewey (2005), training occurs when habitat has complete dominance over habit, which can happen in one of two ways; when habit is ignored and when habit is subsumed. When we train non-human animals, their contribution to habilitation is ignored: “the horse does not really share in the social use to which his action is put” (p.11). However, when habit is subsumed, our contribution to habilitation is rewritten in order to conform to our habitat. To a lesser degree, this is the function of the learning environment, to create members of our community. However, there is a danger in being entirely subsumed in one community. It is why Gee's theory of identity is so important, because our temporary identities not only allow us to connect to many of the domains, but the temporary nature of the virtual identity means we don't risk losing other parts of our selves when we explore other domains. In other words, habit and habitat are reciprocal, but there is a constant power struggle between the two. By rigidly adhering to one way of interacting with the world, the Montessori school directs all students through the same dominating domain. While this does still allow for free choice in the classroom, it is detrimental to the students' *autonomy*, or ability to move between semiotic domains and see the world from a different perspective; to use objects in ways other than their intended purpose.

> A tribe, let us say, is warlike. The successes for which it strives, the achievements upon which it sets store, are connected with fighting and victory. The presence of this medium incites bellicose exhibitions in a boy, first in games, then in fact

> when he is strong enough. As he fights he wins approval and advancement; as he refrains, he is disliked, ridiculed, shut out from favourable recognition. It is not surprising that his original belligerent tendencies and emotions are strengthened at the expense of others, and that his ideas turn to things connected with war. Only in this way can he become fully a recognised member of his group. Thus his mental habitudes are gradually assimilated to those of his group. (p.11)

What we get when this is our method of teaching is homogeneity; one tribe who think and act in one way. It is the destruction of our multifaceted and multilayered society of semiotic domains; as a community it is the destruction of our ability to impart autonomy. This highlights the second, and more important, critique of the Montessori Method; the lack educational value on the role of doubt and inquiry in the learning process. Arguably, the Montessori Method lacks, or at least does not focus on, is exploration. At first it appears exploration is at the heart of this kind of teaching. However, there is little or no attention given to genuine exploration in the pedagogical practices of the Montessori school because there is no emphasis on facilitating fallibility and the cultivation of uncertainty or doubt as integral to the learning process; not only is there no push for exploration and inquiry, there are rules in place that actively stop students from exploring, inquiring, and doubting.

All of the Montessori materials have a specific function, and students are shown this function before they are allowed to interact with them. Deviation from the stated function of a material is not encouraged; the teacher will intervene and show the student the proper, and sole, function. Because of this, there is never any uncertainty as to how an object ought to function, or that it has a function. As Lillard (2013) says, “Montessori classrooms are kept simple and uncluttered, anything not used gets removed” (p.171). There is no need for the student to inquire about an object, to be uncertain about its use or function, all of this is clearly given; if students know what an object is and what it does, they have no need to inquire about it. There is no exploration through inquiry here, only instruction. There is no doubt as to the function of the object, and so nothing can be known about it that hasn't already been given by the teacher. This is not learning in the playful sense, there is no playful attitude; in the Deweyan sense this is a type of instruction or *training*. Put another way, there is no genuine inquiry in the Peircean sense of cultivating doubt that leads to rigorous testing of ideas and hypotheses or in the Deweyan sense of problematising situations as stimulus for exploring imagination.

This analysis highlights something about the playful attitude that I have not given enough weight; the idea of frivolity. I have avoided such terms as fun, happiness, and frivolity because these terms

carry a heavy burden of cultural meaning. We tend think of frivolity as meaningless and unimportant, fun as directly opposed to work, and happiness as not serious; certainly not academic. To a large extent this is what these words mean, both in formal language and in our various context-sensitive domains. But there is something profoundly important about frivolity, fun and happiness that is only ever apparent in their absence. Only when there is no frivolous activities are we in dire need of them. The Montessori Method shows this. In almost all of our semiotic domains there are elements of frivolity, fun, and happiness, and the playful attitude taps into this unknown in an authentic and genuine way.

The Montessori Method of teaching is far removed from the principles of the playful attitude. There is a distinct lack of inquiry, exploration, and imagination. The emphasis on each object in the classroom having one function means there is little or no possibility of something new. Students are trained to know the function of each object, however without an inquiring mind, nothing else can be known about each object. The community's body of knowledge is stagnant, unable to grow. In order to save the Montessori Method from this stagnation, the community of learners need to be introduced to a world where objects have more than one function, or no main function at all, which would be a better representation of the world outside the classroom. This could be accomplished by integrating a game like *Minecraft* into classroom activities. *Minecraft* is especially suited to this task because most of the objects the player encounters in this game have multiple functions or uses. As well as this, the core game in *Minecraft* epitomises frivolity in that there is no main task, goal, or end state the player is working towards (I'm referring to the original game. There has since been additions to the game that add an ending to the game, however the core experience still remains as one of self-directed action). In the next chapter, I will outline a play-based pedagogy that explores the use of *Minecraft* in the classroom.

Chapter 7
Play Pedagogy: An Initiation into a Deweyan Community of Inquiry

The analysis of the Montessori Method of education in the previous chapter highlights something important about the playful attitude that is often hard to articulate, namely, the necessity of the unnecessary. The Montessori Method is missing something fundamental to play pedagogy; so much so it is difficult to understand the Montessori Method as being playful. The playful attitude is that which we invoke when we are seeking to engage with a temporary sphere of activity or knowledge that is, in some sense, other than what we *know*. To play is to inhabit a space *just so* certain activities can occur. There is radical, almost chaotic possibility where the only restrictions come from within the sphere of play. Exploration, for the sake of exploration; doubt, for the experience of doubting; inquiry, for the aim of inquiring; the playful attitude is intrinsically tied to acting, and learning about what is enacted. The Montessori Method allows for none of this. However, it is certainly not the case that play, in this raw form, would be any better as a form of education. The radical possibility of play needs to be embedded in a pedagogy that has the potential to harness the strengths of this kind of activity, while still having as its aim the initiation into, and further reconstruction of, the Deweyan community.

In the previous chapters I have asserted a connection between play as an activity and attitude that embodies a particular kind of learning, and a pragmatist form of education built around the work of John Dewey and Charles Peirce. My aim in this chapter is to construct a pedagogy of play that builds on Peirce's idea of a community of inquirers and Dewey's ideas of communication and education. I contend that the notion of a community of inquirers is much more closely aligned with play than the Montessori Method. By analysing the features of such a community I will show how it embodies the characteristics of play in ways the Montessori Method does not. I will start with Peirce's initial conception of a discipline-based community of inquirers, show how Matthew Lipman and Ann Margaret Sharp reconstructed the Peircean notion of inquiry into a model of educational practice in order to develop Dewey's progressive ideas as an approach to teaching that transforms the structure of the classroom in fundamental ways, and then show how Dewey's contribution can be useful to the kind of education I propose. The concept of a community of inquiry in a classroom is different to that of a discipline-based community of inquiry of professionals, and, according to Peter Seixas (1993), this distinction is important in understanding how individuals become members of communities and, therefore, how they come to hold, and add

to, their knowledge, beliefs, and values. In other words, this distinction is important to the process of educating. I argue that the concept of play is useful in understanding how students are initiated into communities of inquiry. Central to this play pedagogy is the necessity in teaching students, not just how to enter and navigate communities of inquiry, but in understanding the structure of our society as being made up of these communities; and of our knowledge, value systems, and belief structures as existing solely within them. Finally, I will show why frivolity and unnecessary activity, as play is generally conceived, is necessary for this kind of education.

The Community of Inquiry

The justification for the concept of a the community of inquirers put forward by Peirce (1992), that employs an interpersonal method for arriving at results in disciplines such as science, history and philosophy derives from his rejection of Cartesian metaphysics. Specifically he has four points of critique which he uses to mount an argument against Descartes. Peirce argues against, (1) Descartes' idea of universal doubt, (2) that "the ultimate test of certainty is to be found in the individual consciousness" (p.28), (3) that a pluralistic form of argumentation is replaced by a "single thread of inference depending often upon inconspicuous premises" (p.28) and, (4) that the use of God as an explanation for inexplicable phenomena undermines other methods of explanation. For the purposes of this discussion, I will look at the first two of these points, Peirce's critique of both Cartesian doubt and certainty. According to Peirce, we "cannot begin with complete doubt. We must begin with all the prejudices which we actually have when we enter upon the study of philosophy" (p.28). Descartes (2003) begins his meditations with the idea that he must disregard all of his previously held beliefs and start fresh. He says:

> But since reason already convinces us that we should withhold assent just as carefully from whatever is not completely certain and indubitable as from what is clearly false, if I find some reason for doubt in each of my beliefs, that will be enough to reject all of them. (p.18)

Peirce rejects, not just the goal of the Meditations (to discover that which we are certain of, and therefore cannot doubt), but also the method of complete doubt. As Peter Seixas (1993) puts it, "the Cartesian search for certainty itself creates the sole alternative of total skepticism. The pragmatic position is thus to abandon the search for certainty" (p.308). As I have discussed in Chapter 3, however, Peirce (1992) does not throw away the concept of doubt altogether. In fact, it becomes a central part of his philosophy. He says:

> A person may, it is true, in the course of his studies, find reason to doubt what he began by believing; but in that case he doubts because he has a positive reason for it, and not on account of the Cartesian maxim. Let us not pretend to doubt in philosophy what we do not doubt in our hearts. (p.29)

For Peirce, doubt is an irritation. We are much more comfortable when we hold a belief about something. If we consider something to be true, we do not inquire into it further. Even when there is a good reason to doubt something, we are curiously resistant to it. One method for avoiding doubt, which Peirce (1877) calls the method of tenacity, suggests that "the instinctive dislike of an undecided state of mind, exaggerated into a vague dread of doubt, makes men cling spasmodically to the views they already take" (p.5). It is far easier to hold to an already held belief and, argues Peirce, if the only purpose of inquiry is to dispel our irritation of doubt and come to hold a belief, then "why should we not attain the desired end, by taking an answer to a question any way we may fancy" (p.5). Another method of avoiding doubt, the method of authority, is, according to Peirce, much more destructive.

> Let an institution be created which shall have for its object to keep correct doctrines before the attention of the people, to reiterate them perpetually, and to teach them to the young; having at the same time power to prevent contrary doctrines from being taught, advocated, or expressed. Let all possible causes of a change of mind be removed from men's apprehensions. Let them be kept ignorant, lest they should learn of some reason to think otherwise than they do … When complete agreement could not otherwise be reached, a general massacre of all who have not thought in a certain way has proved a very effective means of settling opinion in a country. (pp.5-6)

Doubt is a difficult thing to cultivate, however, it is necessary for any inquiry to occur. We cannot doubt all of our beliefs (at least not at once) and so any inquiry is going to be already situated in a body of knowledge. While this does not prevent doubt from occurring at all, there will always be certain 'truths' that we do not, or cannot doubt. As individuals, we will always be in this situated position. Peirce (1992) suggests that the scientific method can greatly inform our philosophical practices in this way.

> In sciences in which men come to agreement, when a theory has been broached, it is considered to be on probation until this agreement is reached. After it is reached, the question of certainty becomes an idle one, because there is on one left who doubts it. We individually cannot reasonably hope to attain the ultimate philosophy which we pursue; we can only seek it, therefore, for the *community* of philosophers. (p.29)

Peirce makes a point to frame scientific inquiry within a community of scientists, and his philosophical inquiry within a community of philosophers. More importantly, he frames scientific and philosophical *knowledge* within their respective communities. These bodies of knowledge exist, not as certain facts about the world, but as values and beliefs that are held by members of the community in which they are situated. Knowledge, then, takes on a communal and relational quality. This is not certain knowledge, as certainty is no longer the goal here. The values and beliefs of a community are held by its members, and through its members these values and beliefs are given meaning. Each member brings with them their own prejudices and pre-dispositions. Each one is blinded, in some way, to some certain 'fact' that they cannot see, and, therefore, cannot doubt. However, through the community of inquirers, these prejudices become less and less the more diverse the community's members become. Given this, members are able and are encouraged to critique each other's inquiries in order to uncover these prejudices. It is also through these members that this knowledge is critiqued, re-evaluated, and becomes *known* beyond the immediate community. It is important to note the notion of a community of inquiry as classroom pedagogy was not put forward by Peirce himself.

> The term ‘community of inquiry’ has a long history that dates back to Charles Sanders Peirce, whose original formulation is grounded in the notion of communities of disciplinary-based inquiry engaged in the construction of knowledge. However, its current usage as a productive pedagogy owes much to Matthew Lipman who placed it at the centre of his Philosophy for Children curriculum. The community of inquiry is a collaborative, inquiry-based approach to teaching and learning through philosophy; a teaching methodology in the tradition of reflective education in which good thinking and its improvement is central. (Burgh, 2009, p.1)

Although Peirce did not himself use the term ‘community of inquiry’, but he referred to ‘community’ and ‘inquiry’, and the relationship between the two, the term “first appeared in an article co-authored by Matthew Lipman and Ann Margaret Sharp (1978) in the *Oxford Review of Education*” (Burgh & Thornton, 2016, p.165) in which they argue for its adaptation as a model of educa-

tional practice. Lipman gives credit to Sharp for drawing to his attention the Peircean notion of a community of inquirers. Before collaborating with Sharp, Lipman had begun developing Dewey's ideas on education that he claimed Dewey had "treated too lightly, even superficially' (Lipman 2004, p.3). Lipman and Sharp's extensive development of the community of inquiry emphasises the idea of community as an investigative method, "a purposive activity of inquiry, experimentation and collaboration driven by intelligent curiosity" (Burgh and Thornton 2016a, p.165) that is brought about by a "sense of genuine doubt that signals a rupture in consciousness" (Gregory and Granger, 2012, p. 6).

Together with Peirce's and Sharp's contributions, Lipman (2004) admits that his educational philosophy and practice "is built unapologetically on Deweyan foundations" (p.8) but he also points out that "Dewey's approach, through its lack of philosophy in the classroom, experiences much greater difficulty in achieving Deweyan goals" (p.8). Whereas Dewey saw logic and the theory of inquiry and philosophy as the theory or education, Lipman saw philosophy as having a hand in the construction of all theory including education, and he specifically emphasised the practice of philosophy as the methodology of education. In sum, Lipman adapted Peirce's notion of a community of inquiries to classroom practice and extended Dewey's educational theory and practice to philosophical inquiry. Lipman's notion of a community of inquiry is that of a philosophical community of inquiry. Bearing this in mind, I now turn to Dewey.

Dewey's conception of community (discussed in detail in Chapter 3) adds much to the idea of Peirce's notion of a community of inquirers, hence why Dewey's educational theory and practice attracted Lipman's interest. Far more concerned with the lived experience of the individual than Peirce, Dewey's discussion on communities in *Democracy and Education* focuses on two important aspects of the community of inquiry, which raises some important questions. Firstly, how do these communities function (how do they construct knowledge), not just as individual communities, but also the interplay between communities? Secondly, what is the process of entry or initiation into a community? These two questions are of paramount importance to education; the first deals with what we ought to teach young people, and the second, how to teach them. According to Dewey (2003),

> society exists through a process of transmission quite as much as biological life. This transmission occurs by means of communication of habits of doing, thinking, and feeling from the older to the younger. Without this communication of ideals, hopes, expectations, standards, opinions, from those members of

> society who are passing out of the group life to those who are coming into it, social life could not survive. (p.5)

The community of inquiry is the structure of this communication; the continual conversation within and between social groups which are loosely tied together in a form that we typically refer to as society.

The Difference between Teaching and Acting

Dewey's focus on education highlights a problem in using the community of inquiry in the classroom. Seixas (1993) describes the problem within the context of the history class:

> There is a tension in carrying historical knowledge outside of the community of inquiry in which historical knowledge is grounded, into the schools where it is not. To overstate the dichotomy: either the community of inquiry is broadened to include learners beyond competent PhD-holding historians or the products of historians' work are transformed into authoritative 'facts' to be transmitted to students. (p.310)

On the one hand, communities of inquiry are exclusive, allowing membership only to professionals or experts within their own discipline. The community of inquiry of philosophers, for example, has its own history and methodologies recognised by the philosophical community, and individual inquiries are subject to the public scrutiny of professional philosophers. Those who are members of the community of philosophers, those identified as philosophers, engage in the production of knowledge by challenging existing knowledge, constructing new knowledge and dealing with their own sets of problems. People outside of these discipline-based communities of inquiry lack the skills and knowledge and, therefore, are not able to participate in its methodology and practice. They have a mediated access to this body of knowledge though the literature that is publicly available, professional bodies, practitioners and education. This knowledge is also transformed into curricula for students in schools; knowledge that is itself fallible and open to challenge in classroom communities of inquiry. However, Sexias (1993) argues that it would be dangerous to conflate the two communities of inquiry. He questions the “limits to the analogy between scholarly and schoolbased communities of inquiry, whose participants have not been inducted through graduate programs and doctoral degrees” and what would be “required of teachers who, in this conceptualization, must bridge two significantly different communities” (p. 306).

To the first question he points out that students do not have abilities to do what professionals in discipline-based communities do and that knowledge is unidirectional from professional communities to curriculum with students not able to reciprocate in the flow of knowledge. On the other hand, setting students up as recipients of knowledge in a domain, like the banking conception of education, and giving them no power to question, evaluate, or contribute to this knowledge is to commit the sin of Deweyan training that I discussed in Chapter 3. This method ignores the fact that communities of inquiry construct their knowledge, or more generally that all knowledge is constructed in this way. In initiating young people into Deweyan communities, if we do not provide them with educational opportunities on how these communities function, they are unlikely to become full members able to participate in the construction of knowledge. Being able to regurgitate historical facts does not make an historian any more than being able to identify what a pen is makes someone a writer.

Seixas (1993) offers up a solution that, as I will show, has striking similarities to many of the ideas that have been discussed in this thesis. A community of inquiry of professionals is different, says Seixas, to a community of inquiry in the classroom:

> Within the scholarly community there is a hierarchy of authority, based on seniority, recognition, publications, and so on, but there is also an understanding that the most junior member is in a position to challenge the most senior, and that critical comment on each other's work is expected of all. (p.312)

While this is an idealised look at a community of inquiry, especially when talking about an academic community of inquiry, this is in principle accurate. The structure of an academic conference, for example, is set up so that any work that is presented is open to critique by other members, regardless of their station within the community. The classroom, however, while still a community of inquiry, must function differently. The teacher, Seixas says,

> is responsible for structuring the learning experiences of the classroom members. Beyond the teacher lie whole systems of entrenched methods, interpretations and texts, and authorities who are reluctant to relinquish the power that resides in their knowledge to a group of exploratory, much less inventive, children … Ultimately, the teacher is responsible for negotiating the form and content of

> cultural authority imposed from beyond the classroom, and for defining and modelling the interpretive latitude permissible within the classroom. (p.312)

The community of inquiry in the classroom is a unique space in that it uses a simplified version of the community of inquiry to teach students about communities of inquiry. By simplified I mean it is a community of inquiry that is designed to teach students how such communities function. Each element of the community of inquiry is introduced to the student in such a way that lets them practice, so that by the time they find themselves in a discipline-based community of inquiry, the students know how it functions, and why it functions in this way. This is important, for as Dewey (2005) points out:

> The first office of the social organ we call the school is to provide a simplified environment. It selects the features which are fairly fundamental and capable of being responded to be the young. Then it establishes a progressive order, using the factors first acquired as means of gaining insight into what is more complicated. (p.15)

The teacher, at this time, is a mediator between the students and the community. To put it another way, the teacher is a facilitator and co-inquirer (Splitter and Sharp 1995). The teacher and the students, "like their professional counterparts, can move in and out of various communities of inquiry that are articulated by the key learning areas or curriculum subjects, but whose knowledge base is informed by the knowledge of each accompanying discipline" (Burgh 2009, p.3). In order to do this, the teacher sets up a temporary sphere of activity in which a community of inquiry plays an active role in student learning. Students become *members* of this community temporarily. In this time, they are provided with resources to elicit inquiry. The appropriate resources, such as philosophical stories-as-text and other materials that create opportunities for students to problematize the 'text', provide stimulus for inquiry which, in the hands of an experienced facilitator, will elicit a sense of doubt in students about the certainty of their beliefs, and provide opportunities to develop their imagination to construct alternatives to problematic situations. A typical classroom community of inquiry involves,

> the shared reading of a narrative, containing philosophically puzzling ideas, followed by a classroom dialogue initiated by student questions and responses to the text. Through formulating questions, articulating problems, defining concepts, constructing solutions, expressing opinions, providing reasons and evidence,

> constructing criteria, searching for counter examples and evaluating arguments and ideas, students aim to reconstruct philosophical problems and, in so doing, make sense of their world. This process necessitates, as well as scaffolds, the development of the intelligent imagination. (Bleazby 2012, p.96)

This space is not so much controlled by the teacher but he or she provides the conditions conducive to inquiry. Much like a video game where players enter a world that has been constructed for them to experience a particular domain, students enter a classroom that is an educational habitat for communal inquiry. The idea is that this would create classrooms in which teachers and students are encouraged to inquire into topics of mutual interest with each another.

> Classrooms would become places where interest inspired inquiry would become the new curriculum, replacing the model where teachers and other authorities alone dictate what and how things are learned. This is especially the case where an inquiry approach to education is being practiced because an inquiry approach, with its emphasis on student interest and the answering of questions, is used to structure discussion and to pursue knowledge. (Paradales and Girod 2006, p.307)

It is important that this is not a community of inquiry in the way Peirce describes discipline-based communities of inquiry. The community of inquiry of philosophers is going to function in a different way from the community of inquiry in a philosophy classroom. In the classroom, the situated knowledge of the community is, at least at first, almost a secondary concern. What is more important is that students gain an understanding of knowledge construction in a community of inquiry. Much like a game, in order to function in this space, the space itself must provide a framework for learning how to effectively interact within it. This is where the playful attitude is critical in a community of inquiry.

Playful Classrooms

The classroom community of inquiry has two distinct parts, the first part which functions much like a video game. In Chapter 2, I gave an analysis of video games as learning activities. I will briefly reiterate this analysis for a comparison to a community of inquiry. Gee (2007) describes players as embodying three distinct identities when we play; the virtual, the real-world, and the projective. The real-world self is who the player is when they begin the game, the virtual self is the identity the player embodies within the domain, and the projective self is who the real-world self wants the

virtual self to become. When the player begins, the virtual self becomes the focus. Who is this self? How does this self function? The player inquires into the world, she asks what world she exists in, and what rules might constrain her. She temporarily becomes the virtual self. There is no room at this stage to critique the virtual self; there is only an acceptance or a rejection. Either the real world self accepts the virtual self and plays, or she rejects the virtual self and stops playing. The value of the virtual self is its connection to the world. The virtual self is already a member of this world, and so the player as her virtual self can act as if she already belongs to this community.

In a game, who the virtual self is, and what world she resides in is given by the game. In a classroom, this information is given by the teacher. The teacher embodies the student with an identity, and frames her in a community. It is the teacher who constructs the space where inquiry can begin and in this sense places some form of restriction on the initial scope of activities. However, it is still the students who engage in self-directed exploration from that space. In doing so, it is both the teacher and the students who decide where the inquiry leads them. This is reflected in Lipman's description of a community of inquiry, which attempts to follow the inquiry where it leads and not be constricted by existing discipline boundary lines (Pardales and Girod, 2006). In this sense the community of inquirers are "committed to the procedures of inquiry, to responsible search techniques that presuppose an openness to evidence and to reason" (Lipman, Sharp & Oscanyan 1980, p. 45). However, while the community of inquiry is not restricted by boundaries, it does arise from a habitat (or classroom environment) that has specific preconditions, namely, readiness to reason, mutual respect of students towards one another and students and the teacher towards one another, and an absence of indoctrination (p.45).

The teacher and the student are aware that the teacher provides the learning environment which is constrained only by the activity or subject matter. Students are also aware that the communicative interchange between the teacher and students is not egalitarian.

> The teacher in addition to being co-inquirer is also facilitator. The latter role requires teachers to draw on their expertise as members of professional communities (i.e., members of the teaching profession with interests in key learning areas, such as arts, mathematics, science or history). Students come to understand that teachers have subject knowledge, but teachers need also be aware that their expertise and the expertise of their discipline or profession is limited, and they must also convey or model this limitation in their role as co-inquirer. (Burgh & Thornton 2016a, p.173)

Within this understanding of the preconditions of the learning environment students are free to act (as their virtual selves), however, this space can be more or less restrictive depending on what kind of educational environment the teacher constructs. Linking this back to Dewey, the habitat that is given to the students will constrain their activities, and develop certain habits, so long as they act within the community. But this is only half the story. Many play pedagogies stop here, like the Montessori Method, or like many educational games. It is not enough to merely initiate students into learning communities. They also need to be immersed into a community of inquiry which "is the arbiter of the standards of the community and embodies, by its practices, the conventions that dictate sound from unsound inquiry practices" (Pardales and Girod 2006, p.304). As I have said, the community of inquiry in a classroom has two distinct parts. The first half functions much like a video game. The second half draws a great deal on the third identity Gee describes when playing a game; the projective identity. What is often missing in play pedagogies is a proper understanding of the temporary nature of play. Play must end, because without a ceasing of the play world, no genuine inquiry could occur. A closer look at the projective identity will show why this is the case, and it will highlight another difference between a community of inquiry of professionals and a community of inquiry in the classroom.

A part of what makes a video game good insofar as the player learns how to play, can be understood through two psychological theories; Mihaly Csikszentmihalyi's (1990) Flow theory, and Lev Vygotsky's (1978) Zone of Proximal Development (ZPD). I discussed both theories in Chapter 2, but I will reiterate each theory here. The ZPD refers to "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p.86). In groups or with a knowledgeable guide, an individual is capable of going beyond their already established level of skill. Flow theory, on the other hand, is a temporary state where the abilities of an individual are matched by the challenges they face. During this state, an individual is said to be operating at their peak. In Chapter 2 I argued that Flow theory and the ZPD are linked, in that when we are in a flow state we are operating within our ZPD. The reason why this is important is because video games are an effective way of inducing a flow state. This is important to our immediate discussion because, in order for a flow state to be useful in a learning activity, there must be a period of critical reflection on the flow state after it has occurred. During this state there is no time for reflection; temporarily at least, the ego, or self is absent from action, and we simply act within the space in which we reside. It is only afterwards through reflection that we can identify with these past acts.

Critical reflection, both self- and peer-reflection, is a necessary part of a community of inquiry in a classroom, and the projective identity is how individual students, and the class as a whole group, evaluate their actions. In a game, the player takes on the virtual identity while playing. If the play world is rich enough, and is constructed in a way that follows the learning principles Gee sets out (as discussed in Chapters 2 & 3), and if the player engages with the world (with a playful attitude), a state of flow can be achieved whereby the player's ZPD is further developed. In other words, the player learns something from the game. The play activity ends, and the player reverts back to their real-world identity. The player is now able to reflect back on the actions she has taken in game as her virtual self. The projective identity is more of a relation between the virtual self and the real-world self and is the means by which the player evaluates the actions of the player as their virtual self in relation to their real-world self. Let's take the science classroom as an example. For learners to take on projective identities, Gee (2007) says

> they must come to project their own values and desires onto the virtual identity of 'being a scientist of a certain sort' in the classroom. They also must come to see this virtual identity as their own project in the making, an identity they take on that entails a certain trajectory through time defined by their own values, desires, choices, goals, and actions. This is what creates ownership. (p.62)

The projective identity strengthens the bond between the real-world self and the virtual self of the player. The player is able to critically reflect on actions that were taken as the virtual self in the game world and assess the similarities between the virtual and real-world self; the values, beliefs, and motivations of each. Values or beliefs that are encountered as a virtual self can be carried over to the real-world self, and already established values and beliefs can be projected onto the virtual self from the real-world self. This critical reflection can only occur if the game has ended or at least been paused. This does not just happen once, but several times over the course of many games in the same world. This is akin to self- and peer-assessment in a community inquiry, which "offers an *internal* point of reference instead of an external point of reference as their criteria for assessing learning" (Burgh, Field & Freakley 2006, p.131) in a community of inquiry, which is an educational process of constant self-correction and reconstruction of experience and transformation of the self.

Projective identities work somewhat differently in a community of inquiry. In a community of inquiry of professionals, for example, members of the community play an active role in understanding what it is to be a member. Philosophers, for example, frequently engage in work to

uncover what it is to engage in philosophical inquiry. What work constitutes the function of a philosopher in our context? The projective identity in this case is a communal one. If I have an idea about what it is for *me* to be a philosopher that idea should also adhere to what others in my community consider a philosopher to be. The projective identity in the community of inquiry of philosophers, then, holds this idea. It is changed when new members come into the community and add to this idea. To be a member of this community is to hold to our combined understanding of our projective identity as it informs our philosophical inquiry. In other words, to actively align with the projective identity of a philosopher is to hold the method of philosophical inquiry as a meaningful way to understand the world.

In a classroom community of inquiry, the projective identity functions slightly differently again, however, it still has this communal understanding. Individual students enter the classroom, and the teacher offers the virtual identity as a point of access to the community she constructs. The students are all going to approach this differently because they come from different and diverse backgrounds. Students also bring to the classroom their own perspectives and (unquestioned) prejudices on a diverse range of issues; even very young children, as they have already developed social and cultural habits from the communities in which they live and the greater community. Family, religion, socio-economic background, personality traits, interests and hobbies; all these factors and more mean that even in relatively homogenous groups there is going to be differences between individual students. The projective identity is important when play ends, or when play is paused. This is a time of critical reflection. For the individual playing a game alone, their projective identity is the basis of this critique. Is my virtual identity acting in ways *I* as my real-world identity, agrees with? The language is tricky here because, in effect, the player is asking, am I acting in ways I want to be acting in, given this context? However, when considered in this way, the projective identity becomes a compass for who we want to become. There is an acknowledgment here that our actions are our decision, and that they shape who we are and who we will become.

Even for the individual playing at home, their projective identity is connected to the community or domain they have been acting in. What it means for me to be a good orc, or samurai, or pilot, is partially embedded in the community where I am capable of acting as an orc, samurai, or pilot. So the projective identity is a communal influence on the individual. In the classroom, this is much more explicit. The projective identity in a classroom community of inquiry acts as a connection between the virtual identity, and the real-world identities of each student. How one student engages with the virtual identity informs how others in the class can engage. Each student, and the teacher, shares the projective identity and they apply this communal identity to themselves differently.

Similarly, obstacles to the functioning of a community of inquiry, such as the reluctant philosopher, silence and dominance, unsettling questions and so forth become learning experiences for the class (Turgeon 1998; Burgh & Thornton 2015; Burgh & Yorshansky 2011). The projective identity, then, highlights the necessity of Vygotsky's ZPD. Individually, students will either be able to engage with a community, or they will not. But as a group, individual students become capable of learning new ways of engaging. Each time students enter into this temporary space, engage together in that space, and then critically reflect on their behaviour, they add to the knowledge contained in the projective identity.

There is a flow to the classroom community of inquiry, a back and forth movement between the temporary, constructed simulation (the play world) and the classroom where critical reflection on the actions within the constructed world takes place. Students are given opportunities to act within a temporarily constructed space, and then are asked to critically reflect on those actions. This cycle repeats again and again, giving the students opportunities to play with the virtual identity, to find or build connections between their real-world identity and their virtual identity. Students play with the ability to add and change the values in a community of inquiry, and then are given time to reflect on their contributions.

Simulation and Evaluation

David Waddington draws similar connections between video games and pragmatist education in his 2015 paper 'Dewey and Video Games'. Waddington suggests that certain simulation games align with a Deweyan style of education called 'education through occupations' first explained in Dewey's *The School and Society* (1915). This is a different foundation to the community of inquiry that I have discussed in this chapter, however, Waddington's paper touches on many of the same principles of this kind of education. Briefly, education through occupations highlights the need for students to understand the world in which they live in, and the social practices that underpin this world. Dewey's idea is to teach students by having them work in simulated version of different kinds of industry; from textiles, farming, to construction and engineering. The point is not to teach the students a vocation, but to have them understand how the communities around them work and interact as functioning parts to the greater social whole. In understanding the functions of various communities, Dewey claimed students would be able to broaden their understanding of society as communities of practice. As well as this, Waddington discuses a number of other education aims of this theory, and contends that:

> the tasks that children were performing were salutary from the standpoint of teaching them habits of self-discipline and cooperation. Both the occupational tasks and the social simulations were designed to be cooperative, and some of the occupational tasks (for example, building a smelter or building a shed outside of school) required substantial attention to detail. Second, and more importantly, children were also expected to develop habits of scientific inquiry. Education through occupations required the children to figure things out; it was not enough simply to build a smelter from a plan – the children first had to make several unsuccessful attempts to build it, discovering principles of draft and combustion on their way to developing a successful plan for the smelter. (p.4)

The kinds of occupations Dewey was concerned with when he developed this outline were all tied to reclaiming the "mid-nineteenth-century rural America in which he had been raised" (p.2); a simpler time when Dewey believed the general population understood the "social systems of production that underpinned everyday life" (p.2). Waddington acknowledges that the relevance of being able to build a smelter or spinning wheel today is much less important than in Dewey's time, however, he argues that the idea of education through occupations is still a valid one, that "the various intended outcomes of education through occupations – namely, habits of scientific inquiry, technological transparency, and cooperation – amount to a comprehensive educational program that is substantially more ambitious" (p.5). Waddington develops this Deweyan framework into something that resembles what I have described as the classroom community of inquiry. The biggest feature of Waddington's new system is the use of certain simulation video games in the place of an occupation. Inquiry and doubt are still big features of this learning, and the simulated space that students explore is also a big focus. The biggest difference between Waddington's theory and my own comes in two parts; (1) the restrictions on the simulated world, and (2) the focus on critical reflection. In order to draw these differences out, I will look at Waddington's paradigm example of a simulation game, *Fate of the World*, that he believes would work in a pedagogy such as this. I will offer a critique of this game and, using a different game, *Minecraft EDU*, I will show my alternative.

Fate of the World

Fate of the World is a sophisticated text adventure that puts the player in the role of CEO in a new agency called the Global Environmental Organisation with the task of addressing the world's climate crisis. The aim is to stop global warming. It is a turn-based game where players choose

which policies to implement in certain countries in order to stop the adverse effects of climate change while still keeping these countries productive. Much like other similar games, *Fate of the World* falls into many of the traps of an educational game. There is an incredible amount of data to sift through on each turn in order to decide what to do. This data is presented in the form of charts and graphs of various sorts, as well as short bursts of relevant information about certain areas of the world which are in turmoil in one way or another. This data is all interconnected, however, it is presented to the player all at once and it isn't clear what piece of data is relevant to any decisions that can be made on a given turn. While the simulation of the global political structure is quite detailed, the gameplay is not tailored to anyone without a degree in politics or international business. There is a very large amount of assumed knowledge that the player must have in order to understand the complexities. By the end of my first few turns I gave up trying to understand what was going on, and attempted to see just how badly I could lose. Even when I did lose, I wasn't sure exactly why I lost. To conclude, I had no interest in the game after a few turns because I was unsure any of my actions had any effect, and when they did I did not understand why.

This experience was quite frustrating for me, because climate change is a very important issue in world, and a game capable of showing the complexities of this problem would be immensely powerful. If I, an interested member of the global community, fail to be drawn into *Fate of the World*, how can we expect all school students to be interested? This game fails to adequately function as a simulation that would be useful to a classroom community of inquiry for two reasons; first, it makes the same mistakes most educational games do by wrapping a complex subject matter around a poorly executed game, and second, even if *Fate of the World* could be remade to include a detailed tutorial that solved all of these problems, the game itself is far too restrictive in what players can do. This game is a textbook on current political policy, not a world where players can explore the intricacies of the global climate.

When I couldn't understand what was going on after a few turns of *Fate of the World,* I attempted to see how badly I could lose. If I couldn't save the world from climate change, I wanted to see how badly things could get. This might seem like a childish and silly thing to do, tantamount to blowing up things to see what would happen. To a certain extent, this is true. However, this is also one way in which game players learn about games. If a player cannot figure what to do in a game world, it is common to see what cannot or should not be done, and work backwards. This kind of exploration is necessary in finding out what kind of world players inhabit. In understanding global climate change, I wanted to see what would happen if I placed an embargo on all fossil fuels, or if I outlawed combustion engines. However, the scope of the game did not allow me do this. After only a few

turns, I was often faced with a game over screen because I had failed to meet some quota that I did not understand. In summary, *Fate of the World* was far too restrictive for any sort of genuine exploration to occur.

What is required for *Fate of the World* to still be useful in some context is a very large amount of teacher input before the game begins. The game itself teaches very little about the problems the player is facing. Waddington says that

> these games represent an enormous labor savings for the teacher. As I noted previously, the original Deweyan social simulations were labor-intensive, requiring the teacher both to set up the simulation and take sole responsibility for leading the students through it. In a simulation game, by contrast, these tasks are managed by the game itself, which, at least in the ideal case, will have a curriculum carefully scaffolded into it. (p.12)

Fate of the World does not avoid the problems Waddington outlines here. This, however, leads to a far bigger problem about what games are capable of doing. Waddington goes on to discuss the similarities between simulation games and the concept of teaching machines from B.F Skinner (1954).

> These machines purported to shepherd students through curriculum materials with only minimal aid from teachers. The proponents of the system claimed that a curriculum that proceeded in baby steps and a carefully calibrated reward system would enable students to develop the appropriate learning outcomes simply by working through the program. This research program failed, largely because of its artificial and overly regimented approach to learning. Simulation games, however, avoid this problem by offering students an entire social system to discover. Although students are scaffolded within the simulation to some extent, they must be active inquirers within the context of the simulation's world rather than passive consumers of a preset curriculum that has been chopped into bite-sized behaviourist niblets. (Waddington 2015, pp.12-13)

This passage brings into focus one of the biggest problems with using games in education. In order for students to be active inquirers in a simulation, they first must understand what it is to be an active inquirer. This is the whole point of the simulation, to teach the methods of inquiry. We

cannot expect students to function as members in a community of inquiry if we do not have teachers who are, at every stage, guiding the students. This does not mean that students need constant supervision within the simulation, but that there needs to be frequent movement in and out of the simulation in order to facilitate critical reflection and a refocusing of inquiry. It is not enough to give students a game about climate change. Even if it were a better game than *Fate of the World*, it still would not be able to replace the classroom community of inquiry. Waddington does acknowledge this, however, I think understanding the simulation as only one part of the community of inquiry is necessary. In the next section, I will offer an alternative game to *Fate of the World,* and provide a detailed look at how this class might function.

Minecraft EDU

Minecraft is a simulation of the real world, if the real world were made entirely out of 1x1 metre cubes. The ground is made up of dirt cubes, under the dirt is rock cubes, the trees are wood cubes with leaf cubes on top, the clouds are cubes; everything is a cube. The player is dropped into this world and given very little direction. Through experimentation, players discover you can dig up a dirt cube, and carry it around. If you hit a tree several times, a wood cube pops out. In your inventory is a list of all the cubes you can carry, and a 2x2 grid that you can drop cubes into. Place a cube of wood into this grid and out pops refined wood. Put two of these pieces of wood in the grid one on top of the other and you get a stick. One stick and some stone, and you can make a range of tools; a shovel, a sword, an axe, or others. From here the game grows exponentially. There are a wide range of different materials in the world, all in different locations above or below ground. As the player you *mine* for resources, and then *craft* things out of them. Originally there was no further goal in the game other than exploration and construction. Since its release, the developers have added a story mode in the form of a quest to slay the Ender Dragon, however, it is entirely up to the player to choose to follow this quest or not. Arguably, the game's greatest strength is that there is no point or end goal, just experimentation and exploration. For this reason *Minecraft* is well suited for use in the classroom.

Of course, just playing a game like *Minecraft* will not automatically fulfil all of our criteria for play pedagogy. We need to appropriately embed Minecraft into a series of planned lessons where the virtual space the game provides is useful. *Minecraft EDU* is a modification (mod) to the original game designed specifically for teachers to create specific worlds for their lessons. Normally the *Minecraft* world is procedurally generated; each time a player starts a new game, a random world is built filled with different landscapes and resources. Players can play in their own world, or join an

online world populated by other players. *Minecraft EDU* allows teachers to construct their own world with specific qualities. There are many such worlds already created and uploaded as teacher resources. You can explore the pyramids of Giza, the temple of Artemis, or the USS Enterprise from the television show Star Trek. There are worlds constructed to teach basic engineering, physics, mathematic principles, and many more. *Minecraft EDU* allows the teacher to set up a virtual space where a particular kind of activity can occur. Let's go into more detail with an example of a more complex world.

Keeping with the theme of environmentalism from *Fate of the World*, I will use a constructed world from *Minecraft* that challenges players to manage resources while still achieving a goal. In this world players are all stranded on an island. Their task is to construct a ship that will take them home. The ship is not functional, however, the teacher sets certain conditions on the ship. It has to be a certain size and made from different materials. The problem arises in that the island has limited resources. The teacher sets a series of tasks for the students, like building homes for everyone to live in while on the island, farming food for everyone each day, as well as constructing the ship. Students have to manage a range of variables, for example, wood production. On the island there is a group of trees. One of the conditions of the game is that there has to be a certain amount of trees always on the island, or else there is not enough oxygen. However, wood is a valuable resource that is needed in a lot of construction. Finding a balance between wood production and reforestation of the island becomes one constant element among many in this world. Once the conditions are set, the players are left on their own. Over several session students are given time to play in world and then have time to discuss what is working and what is not working in class. The success or failure of this lesson rests entirely on the ability to get the students to critically reflect on their actions in game. Each student is given a role or an identity on the island. This can be given by the teacher or by the students themselves. One student might be in charge of finding rare metal under the ground, others might be farmers, builders, or loggers.

The island, when constrained properly, becomes a simulation of a community. The teacher can then use this simulation to bring the students into conversation about resource management, property rights, moral and ethical obligation, or community involvement. The game, in this sense, is a text in the way I described in Chapter 6. *Minecraft* is a particularly malleable text in that teachers can use it to start a conversation about a wide range of topics. However, this shows the limit of what a game like this can achieve in the classroom. The pedagogy of play goes a step further than a mere text can, by integrating the principles of play into our communities of inquiry. In Chapter 6 I discussed the two ways in which games can enter the classroom. The example of *Minecraft EDU* shows a

combination of these two ways. *Minecraft* is brought in as a text for students to engage with, but this only constitutes half of the community of inquiry in the classroom. The second half is where the teacher facilitates and co-inquires with students, through critical reflection on their actions within the text, to an understanding of the community of inquiry in which they were acting.

Play Pedagogy

The foundation of the pedagogy of play is in a community of inquiry. This is, however, not a discipline-based community of inquiry of professionals, but a classroom community of inquiry. In order to teach the methods of a community of inquiry, students must start as playful; they require an open and playful attitude in order to engage in, not just one community, but many. Through the use of virtual and real-world identities, students are able to experiment and explore what it is like for them to be members of different communities of inquiry. In these communities students collectively construct and are constructed by the projective identity. The end result of this kind of learning is an understanding of the self as identifying with a set of communities, each one holding differing values, beliefs, and knowledge. This multi-faceted self is the embodiment of the playful student; one who is able, and willing, to engage in a wide range of communities.

Conclusion

The End of the Beginning

The Last of Us is a game set approximately 20 years after a zombie apocalypse decimates the world. The human race has survived in highly militarised zones built in the shells of old cities and small rural communities where long term fortification was possible. You play as Joel, a middle aged man who saw the downfall of humanity and has survived ever since by doing everything he can, and Ellie, a teenage girl who has only known this world. *The Last of Us* is more than just a zombie shooter (a game set around shooting zombies and surviving in each area), it tells a deep and complex tale of survival, sacrifice, and friendship. It is an experience to play this game. There is a lasting effect on the player once the game ends; something lingers in the real world even after the game is switched off and the play world collapses back in on itself. It is a similar sensation when finishing a book that has drawn the reader into its world, or a movie that has captured its viewer. The thing that is real but not real, the voluntary engagement that the experiencer has witnessed or been a part of, ends; however we do not quite let go. It is almost as if the suspension of disbelief, the encounter with doubt, changes those who authentically participate. The world appears little more elastic, more able to stretch into modes that were, until now, only dreamt of.

This thesis has been about engaging with a way of thinking; it has been about playing. As a tool for exploration, play often leaves us with more questions than answers, with more doubt than certainty, with more possibility than reality. Unfortunately this is not a position that is currently valued in our communities. Answers are more important than questions, doubt is an unpleasant *irritation* as Charles Peirce would say, and reality will always have precedence over possibility. To a certain extent, this is unavoidable. Schools teach students how to acquire answers, how to dispel doubt, and how to face reality; they teach practicality. The aim of this thesis has not been to attack practicality, but to balance it with its necessary opposite; frivolity. If schools truly do value certainty, the lesson has to start with doubt. As Peirce (1877) would say, “[d]oubt is an uneasy and dissatisfied state from which we struggle to free ourselves and pass into a state of belief; while the latter is a calm and satisfactory state which we do not wish to avoid, or to change to a belief in anything else” (p.4). In order to understand reality, there has to be room for possibility, for something other than what is *real*. If answers are valued, understanding and identifying questions is also necessary. For example, 42 is a fine answer, however as Douglas Adams points out in *Hitchhiker's Guide To The Galaxy (1979)* it is not much help in understanding the universe saying, “'I checked it very thoroughly,' said the computer, 'and that quite definitely is the answer. I think the problem, to be quite honest with

you, is that you've never actually known what the question is'" (p.Ch30). In the introduction to this dissertation my aim was to frame the reader, to give access to a world (or worlds) that I explore. The conclusion, then, seeks to de-frame the reader back into *their real world*, albeit with something still lingering from the encounter with playful worlds and uncertain minds.

Foundations

Following on from Dewey's (2005) claim that society exists through transmission (p.5), the aim of this thesis was to explore the nature of this movement, what constitutes it, and what is required for its continuation. Communities are formed by and in the connections between people sharing their experiences with others. To understand a particular community, there needs to be an understanding of the relationships between the members of that community, because it is here that the community actually exists. Given all this, education for Dewey is concerned with communication, so that the young of a community can learn to share their experiences with others, and hear others experiences. Initially, this will occur in the communities the young are born into, and will constitute experiences that they are aware of, share, or understand. As time goes on, properly educated individuals should be exposed to experiences beyond their small communities. It is here where their experiences and the experiences of others will be further apart. The sharing of these experiences will be harder to accomplish because, as Dewey says, part of communicating an experience is "getting outside of it, seeing it as another would see it, considering what points of contact it has with the life of another so that it may be got into such form that he can appreciate its meaning" (p.6).

This is much like this dissertation, and most of philosophy, really. This is because *I* know what I'm talking about, and I'm convinced of it. My task is to convince others that this idea is worth sharing, that this experience (the experience of researching and writing this thesis) is somehow worthwhile. In order to do this, I need to put my understanding in a language others will understand. Only then can I share my experiences; only then can I be a member of this community. Going beyond our already established communities, then, can be very difficult, because some connection between where an individual is and where they want to be must be found in order for them to even know that others exist, and then make that journey. This is what Dewey, and myself consider to be the reason, the why, of school. And it is, as James Paul Gee would say, beyond anything else, what play, and specifically the playful attitude, does. Play is a movement, play is an opening. It may seem strange to suggest that video games offer up one of the best examples of Deweyan communication in action. Yet, this is the premise of Gee's work; that video games offer an effective way of engaging with the kind of learning that Dewey discusses.

A reoccurring theme in this dissertation has been the tendency to view the world in terms of dualisms. Activities and attitudes, minds and bodies, habit and habitat, the self and the community, are usually categorised as being in opposition to one another. We are asked to find causal connections between them; which precedes the other, which is more important? Do our minds control our bodies, are our habits formed solely by our habitat, are we an individual or a community, do activities produce attitudes? This impulse to collapse one side into the other, to end up with an antecedent and a consequent is a throwback to our western Cartesian foundations. However, these foundations fail because they can only focus on one side of each equation. By paying attention to habitat, we lose habits; by valuing minds, we ignore bodies; by asserting the individual, we destroy the community; by focusing on activities, we forget about attitudes. Game playing can teach the player about control and about being controlled.

Threads and Extensions

Following on from my argument in previous chapters (Chapter 2,3,6), video games are forms of domain-sensitive communication that can be used to explore an idea, emotion, complex theory, area of knowledge, or identity. They are, as I have called them, *texts*, and can and ought to be studied in a similar way as other texts like books, movies, plays, and some forms of art. In this way, we can view video games as being novel and interesting tools for education; for not just initiation into a conversation but as a way of teaching our members how to communicate, in a Deweyan sense.

What is more interesting, however, is the method by which video games do this. The playful attitude opens up lines of communication between disparate semiotic domains. It does this by giving temporary access to a domain or area of knowledge and helps to build an identity within that domain. Through the process of habilitation, the individual is shown *how* they are constructed in a particular environment, and how to act on that environment through cultivated habits. Game playing, in this sense, is exploration, experimentation, and inquiry.

In Chapter 4 I explored the idea that interacting with the physical world is much like interacting with the social world of communities, in that we inhabit space beyond our immediate bodies. Dewey's understanding that physical space, like our social space, is just as much our habitat adds the importance of paying attention to both. Much like our social space, interacting with the physical world involves us extending out into the world. It is in this chapter that I also introduced the idea of the virtual world, another space in which we extend. However, the virtual world, understood in this

context is not some new and foreign place, but just another layer of our communities. The virtual world has always been present. The virtual world has been described as a magic circle, or sacred space, or temporary sphere of activity. The digital world of video games is just an extension of the virtual world we have always known. It is in games that we have explored the ways in which we interact with and extend into this world.

Games, particularly video games, have been keenly interested in the interface necessary for interaction and extension into other spaces. In order to do this, players employ the playful attitude because it is this attitude that allows us to inquire in unknowns; into areas where we know very little or nothing. If there was to be hypothesis for this thesis, it is this: that the playful attitude is a method of inquiry that is used to explore unknown spaces, areas of knowledge, and ways of being.

The Future of Games in Education

There are two ways in which games can enter the classroom. The video game as a text that can be *read* is one way. There are many games available right now that could be used in varying contexts for classes in English, Science, Mathematics, History, Geography, Art, Business Studies, Physical Education, Philosophy, and many others. I have discussed a few of these games. While not all video games will be useful as educational tools, there are a great many that would be.

The other way is the playful attitude, and the underlying principles of video game design, that point to a more fruitful way of incorporating play in the classroom. The philosophy of play points to a mode of education that highlights the need for inquiry-based learning, an exploration and development of the self and community, and an extension into the world.

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Appendix of Gaming Terms

Avatar – The player's avatar is the character in a game that they control.

First Person Shooter (FPS) – This is a genre of game that centres around the game mechanic of shooting a weapon of some sort. The term first person refers to the camera angle where the player views the game from the perspective of his/her avatar. Instead of seeing a character the player controls, they see as if they were looking through their eyes. FPS's usually show the avatar's hands or, more often, what they are carrying in their hands; guns.

Grinding – Grinding is a strategy of gameplay, usually associated with RPG's. In most RPG's performing the same task repeatedly rewards the player. A player will complete the same or similar tasks multiple times to increase their stats such as health, power, abilities, or item strength. For example, the more times the player engages in combat with a sword, the better he/she becomes at sword-fighting.

Heads Up Display (HUD) – Information that is relayed to the player in the form of a user interface. Typically elements of a HUD include a health bar, map, game progression or mission status, the game menu, abilities, possible items or weapons.

Linear – A linear game is one where the player progresses through a game sequentially, going from one set task to another. Players must complete each task in order to progress, and are led through the game in this way. This is contrasted by non-linear games, where the player has a choice as to what he/she does in a game. Non-linear games often have multiple tasks to perform at one time, and it is up to the player to choose which one he/she will attempt first.

Role Playing Game (RPG) – A game genre. RPG's are game that centre around the development of the players character within a detailed, often fantasy, world. The players character in an RPG is highly customisable. The player decides what armour to wear, what weapons to wield, and what quests to go on. RPG's usually employ levelling up as a game mechanic, where the player becomes progressively better at specific task the more they do them. This sometimes also applies to items. See *Grinding* for more on this.

Sandbox or Open World Games – Sandbox or open world games are a particular genre of game where the primary game mechanic is that the game world is large, non-linear, and can be freely explored by the player. While sandbox games are typically non-linear, these two mechanics function in different ways. Some open worlds, where there can be a lot of possible exploration still have fairly linear story lines. Other sandbox games (like *Minecraft*) have little or no storyline at all, so the player is not directed in any particular direction.

Third Person – Referring to the camera angle of a game. Third person denotes an angle where the player views the game action from above and behind the avatar they are playing.